Undergraduate Curriculum Committee
Meeting Minutes
March 5, 2019 / March 7, 2019
EH 101 / LHH 302

Members Present: Blake Bickham (for Ann Gillies), Lisa Driskell, Eric Elliott, Sean Flanigan, Keith Fritz, Lucy Graham, Geoffrey Gurka, Jennifer Hancock, Sarah Lanci, Sam Lohse, Denise McKenney, Joseph Quesenberry, John Seebach, and Jill Van Brussel.

Ex-officio members present: Maggie Bodyfelt, Barbara Borst, Janel Davis, and Johanna Varner.

Guests: Suzie Garner (Art & Design), Scott Kessler (Engineering), Eric Miles (CSMS), and Lori Payne (CSMS).

Recording Secretary: Emily Dodson

Chair Driskell called the meeting to order at 3:30.

The agenda was completed over two sessions, one on March 5th and the second on March 7th. Chair Driskell entertained a motion to extend the March 5th meeting by half an hour (Flanigan/Gurka). This motion carried. In this meeting, the committee covered items I and II as well as Curriculum Proposals (III) 1 through 107. The meeting adjourned at 5:30. A subsequent meeting was called for March 7th to complete the remainder of agenda. This meeting commenced at 3:31 and adjourned at 3:57. In the absence of Chair Driskell, Vice-Chair Hancock conducted the meeting.

Attendance for the March 7th meeting is as follows:

Members Present: Eric Elliott, Keith Fritz, Lucy Graham, Geoffrey Gurka, Jennifer Hancock, Sarah Lanci, Sam Lohse, Denise McKenney, Joseph Quesenberry, John Seebach, and Jill Van Brussel.

Members Absent: Lisa Driskell, Sean Flanigan, and Ann Gillies.

Ex-officio members present: Maggie Bodyfelt, Barbara Borst, Morgan Bridge, and Janel Davis.

Guests: Stephen Merino (SBS), Tamera Minnick (PES), and Jeremy Tost (SBS).

Recording Secretary: Emily Dodson

I. New Business

A. Essential Learning Minutes, 12.13.18
B. Essential Learning Minutes, 1.29.19

Chair Driskell introduced the Essential Learning Subcommittee minutes from 12.13.18 and 1.29.19. Motion: To approve the Essential Learning Subcommittee minutes from 12.1.19 and 1.29.19. No discussion. Motion carried unanimously. These minutes are presented starting on page 3.
II. Ex-Officio Reports

A. Assistant Vice President of Academic Affairs for Assessment and Accreditation
   No updates.

B. Registrar’s Office
   No updates.

C. Financial Aid
   No updates.

D. Library
   Borst stated that some new courses were not sent to her for the completion of a library assessment. Assessments for these are in progress. Committee members were reminded to submit new courses and programs for library assessment.

E. Catalog Description Reviewer
   Varner noted that some course descriptions for courses on the agenda were not sent to her for review. There are no issues with these descriptions; however, members were reminded to send new or revised descriptions for review.

F. Essential Learning
   No updates.

III. Curriculum Proposals

Summary of committee actions on curriculum proposals begins on page 5.
Further details of proposals begin on page 18.

IV. Information Items

A. Notes for Proposal Preparation
   i. **Affected Departments Section:** Vice-Chair Hancock reminded the committee to note departmental discussions about proposals in the section regarding communications with affected departments.
   ii. **Content/Style:** The committee was asked to avoid naming specific faculty members and to not use first person in their answers.
   iii. **New Curriculum System Note:** When we switch to the new system, proposals will go through a workflow. This will affect our deadlines. Instead of proposals having to be submitted by a certain date to be on a given agenda, proposals will need to have reached a certain step in workflow to qualify for inclusion on a given agenda. Members were asked to encourage their departments to begin planning any proposals for next year now to avoid potential delays as we adjust to the new system.

Respectfully submitted by Emily Dodson, March 8, 2019.
Essential Learning Committee

Minutes: Dec 13, 2018


The primary purpose of the meeting was a discussion with Morgan Bridge about the assessment plan for Essential Learning courses. Among the specific issues discussed was the possibility of assessing spring Milestone courses, and the possible implementation of the new ethics SLO in Essential Learning courses. Morgan will be going back to the Assessment Committee with our input and will meet again with us in the future regarding specific instructions.
Minutes: Jan 29, 2019

Essential Learning Committee

Voting members: Stephen Merino, Diana Bailey, Theresea Chase, Tim D’Andrea, Julie Barak, Kyle McQuade, Ann Gillies; Doug O’Roark (Chair)

The Essential Learning Committee considered several course name proposals.

LLMC proposed to change the official name of two courses (ENGL 111 & ENGL 112) from "English Composition" (both courses) to "English Composition I" (ENGL 111) and "English Composition II" (ENGL 112). This would really help the Registrar's office for a variety of reasons. Nothing else about the courses changes, no structural changes whatsoever, same syllabus, same outcomes, the only thing that changes is the name.

There is a new major in SBS titled "Applied Anthropology and Geography", it puts together several courses that already existed but for the internal consistency of the major they need to change the name/number of a course from FOAN 180/L to ANTH 230/L. Again this is purely a name/prefix/number change, there will be no structural change, same syllabus, same outcomes, etc. Despite the number change the course remains a lower-division course (FOAN stands for Forensic Anthropology and ANTH stands for Anthropology). ANTH 230/L will replace FOAN 180/L as a Social and Behavioral Essential Learning option.

Follow-up: The course numbers 230/230L were later determined to not be available for use. These course numbers were subsequently changed to ANTH 231/231L.

The Essential Learning Committee voted via email and unanimously approved (7-0) all of the above proposals. No concerns were voiced about any of the changes.
<table>
<thead>
<tr>
<th>Proposal</th>
<th>Committee Action</th>
<th>Committee Action Members</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Course Addition: UNIV 104 Beyond College Success</strong></td>
<td>Approved</td>
<td>Lohse, Elliott</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td><strong>2 Course Modification: UNIV 100 College Success Skills</strong></td>
<td>Approved</td>
<td>Flanigan, Gurka</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td><strong>3 Course Addition: ARTG 223 Commercial Typography and Sign Painting</strong></td>
<td>Approved</td>
<td>Lohse, Flanigan</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td><strong>4 Course Addition: ARTG 427 Lab Assistant</strong></td>
<td>Approved contingent upon corrections</td>
<td>Lohse, Flanigan</td>
<td>Fall 2019</td>
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<tr>
<td>The committee expressed concern over the repeatability of the course.</td>
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<td>Garner and Elliott clarified that the high level of skill that can be</td>
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<td>achieved in these areas cannot be reached through a single enrollment.</td>
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<td>Allowing students to repeat the course allows them to further refine</td>
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<td>these skills. The committee requested that the SLOs be updated to</td>
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<td>reflect this ongoing development, and Elliott agreed to revise these</td>
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<td>accordingly. The contact hours, engagement, and preparation minutes were</td>
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<td>corrected.</td>
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<tr>
<td><strong>5 Course Addition: ARTS 225 Introduction to Photography</strong></td>
<td>Approved contingent upon corrections</td>
<td>Gurka, Lohse</td>
<td>Fall 2019</td>
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<tr>
<td>There was discussion about how this course aligns with ARTA 222. It was</td>
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<tr>
<td>agreed that the topical course outline will be updated to reflect the</td>
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<td>difference in this course.</td>
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<tr>
<td>**12 Course Addition: ARTS 275 Printmaking: Screen Printing and</td>
<td>Approved contingent upon corrections</td>
<td>Flanigan, Lanci</td>
<td>Fall 2019</td>
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<tr>
<td>Lithography</td>
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<td>A couple of typos were corrected. Elliott noted that the SLOs do not</td>
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<td>reflect the final approved outcomes, and he agreed to submit the revised</td>
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<td>SLOs.</td>
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<tr>
<td><strong>6 Course Addition: ARTS 325 Intermediate Photography</strong></td>
<td>Approved contingent upon corrections</td>
<td>Gurka, Lohse</td>
<td>Fall 2019</td>
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<td>There was discussion about how this course aligns with ARTA 322. It was</td>
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<td>agreed that the topical course outline will be updated to reflect the</td>
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<td>difference in this course.</td>
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<tr>
<td><strong>7 Course Addition: ARTS 335 Digital Alternative Processes</strong></td>
<td>Approved</td>
<td>Gurka, Lohse</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<td>Proposal</td>
<td>Committee Action</td>
<td>Effective Date</td>
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<tr>
<td>8 Course Addition: ARTS 336 Photography Workshop I</td>
<td>Approved</td>
<td>Fall 2019</td>
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<td>There was discussion regarding the SLOs. Elliott confirmed that Dr. Bridge has reviewed, edited, and approved the final versions of SLOs.</td>
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| 13 Course Addition: ARTS 376 Printmaking: Advanced Intaglio and Relief | Approved contingent upon corrections | Fall 2019      |
| A typo was corrected. Elliott noted that the SLOs do not reflect the final approved outcomes, and he agreed to submit the revised SLOs. |

| 9 Course Addition: ARTS 425 Advanced Studio Photography               | Approved contingent upon corrections | Fall 2019      |
| There was discussion about how this course aligns with ARTA 422. It was agreed that the topical course outline will be updated to reflect the difference in this course. |

| 10 Course Addition: ARTS 435 Wet Alternative Processes               | Approved                | Fall 2019      |
| There was discussion regarding the SLOs. Elliott confirmed that Dr. Bridge has reviewed, edited, and approved the final versions of SLOs. |

| 11 Course Addition: ARTS 436 Photography Workshop II                | Approved                | Fall 2019      |
| There was discussion regarding the SLOs. Elliott confirmed that Dr. Bridge has reviewed, edited, and approved the final versions of SLOs. |

| 14 Course Addition: ARTS 476 Printmaking: Portfolio Development     | Approved contingent upon corrections | Fall 2019      |
| Elliott noted that the SLOs do not reflect the final approved outcomes, and he agreed to submit the revised SLOs. |

| 19 Course Modification: ARTE 101 Two-Dimensional Design             | Approved                | Fall 2019      |
| No discussion.                                                     |

| 20 Course Modification: ARTG 321 Advanced Typography               | Withdrawn               | Fall 2019      |
| The department elected to withdraw this proposal for additional review. |

| 21 Course Modification: ARTG 338 Advertising Design I              | Withdrawn               | Fall 2019      |
| The department elected to withdraw this proposal for additional review. |

<p>| 22 Course Modification: ARTG 373 Screen Printing for Graphic Design | Withdrawn               | Fall 2019      |
| The department elected to withdraw this proposal for additional review. |</p>
<table>
<thead>
<tr>
<th>Proposal</th>
<th>Committee Action</th>
<th>Members</th>
<th>Effective Date</th>
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<tbody>
<tr>
<td>23 Course Modification: ARTG 406 UX Design</td>
<td>Withdrawn</td>
<td>Gurka, Lohse</td>
<td>Fall 2019</td>
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<tr>
<td>The department elected to withdraw this proposal for additional review.</td>
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<tr>
<td>24 Course Modification: ARTG 421 Contemporary Letterpress</td>
<td>Withdrawn</td>
<td>Gurka, Lohse</td>
<td>Fall 2019</td>
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<tr>
<td>The department elected to withdraw this proposal for additional review.</td>
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<tr>
<td>25 Course Modification: ARTG 450 Identity Design</td>
<td>Withdrawn</td>
<td>Gurka, Lohse</td>
<td>Fall 2019</td>
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<tr>
<td>The department elected to withdraw this proposal for additional review.</td>
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<tr>
<td>26 Course Modification: ARTG 493 Portfolio Development</td>
<td>Withdrawn</td>
<td>Gurka, Lohse</td>
<td>Fall 2019</td>
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<tr>
<td>The department elected to withdraw this proposal for additional review.</td>
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<tr>
<td>27 Course Modification: ARTS 152 Foundation Drawing II</td>
<td>Approved</td>
<td>Lohse, Graham</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>31 Course Modification: ARTS 274 Printmaking: Intaglio and Relief</td>
<td>Approved</td>
<td>Flanigan, Lohse</td>
<td>Fall 2019</td>
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<td>No discussion.</td>
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<tr>
<td>28 Course Modification: ARTS 360 Sketchbook</td>
<td>Approved</td>
<td>Lohse, Graham</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>32 Course Modification: ARTS 370 Printmaking: Lithography</td>
<td>Approved</td>
<td>Flanigan, Lohse</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>33 Course Modification: ARTS 371 Printmaking Workshop I</td>
<td>Approved</td>
<td>Flanigan, Lohse</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>34 Course Modification: ARTS 375 Screen Printing II</td>
<td>Approved</td>
<td>Flanigan, Lohse</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>29 Course Modification: ARTS 492 Painting Workshop IV</td>
<td>Approved</td>
<td>Lohse, Graham</td>
<td>Fall 2019</td>
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<tr>
<td>The committee expressed concern over the repeatability of the course. Garner and Elliott clarified that allowing students to repeat the course allows them to further refine their skills in this area. The committee agreed that this seemed appropriate.</td>
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| Proposal | Committee Action Members
(motion/second) | Effective Date |
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<tr>
<td>30 Course Modification: ARTT 484 Bronze Workshop II</td>
<td>Approved Lohse, Graham</td>
<td>Fall 2019</td>
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<tr>
<td>The committee expressed concern over the repeatability of the course. Garner and Elliott clarified that allowing students to repeat the course allows them to further refine their skills in this area. The committee agreed that this seemed appropriate.</td>
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<tr>
<td>15 Course Deletion: ARTG 339 Advertising Design</td>
<td>Withdrawn Gurka, Elliott</td>
<td>Fall 2019</td>
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<tr>
<td>After initial approval of this course deletion by the committee on 3.5.19, the department elected to withdraw this proposal for additional review. The committee voted to revoke the approval and approve a withdraw of the proposal on 3.7.19.</td>
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<tr>
<td>16 Course Deletion: ARTS 110 Digital Photography</td>
<td>Approved Graham, Lanci</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>17 Course Deletion: ARTS 270 Screen Printing I</td>
<td>Approved Graham, Lanci</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>18 Course Deletion: ARTS 460 Sketchbook II</td>
<td>Approved Graham, Lohse</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>35 Program Modification: BA Art History (New Program)</td>
<td>Approved Graham, Gurka</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>36 Program Modification: BA Studio Art: 3277</td>
<td>Approved Graham, Gurka</td>
<td>Fall 2019</td>
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<td>No discussion.</td>
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<tr>
<td>39 Program Modification: BFA Art-K-12 Education: 3270</td>
<td>Approved Graham, Gurka</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>39 Program Modification: BFA Art-K-12 Education: 3270</td>
<td>Approved Graham, Gurka</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>38 Program Modification: BFA Art-Studio Art: 3272</td>
<td>Approved Graham, Gurka</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>37 Program Modification: BFA Graphic Design-Visual Design: 3274</td>
<td>Approved contingent upon corrections Graham, Gurka</td>
<td>Fall 2019</td>
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<td>A statement about a required grade of &quot;C&quot; or higher for ARTG courses taken as general electives was removed.</td>
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<td>Proposal</td>
<td>Committee Action</td>
<td>Members</td>
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<tr>
<td>40</td>
<td>Course Addition: BIOL 338 Small Mammal Biology</td>
<td>Approved</td>
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<td>41</td>
<td>Course Modification: BIOL 405 Advanced Ecological Methods</td>
<td>Approved</td>
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<td>42</td>
<td>Course Modification: BIOL 405L Advanced Ecological Methods Laboratory</td>
<td>Approved</td>
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<td>43</td>
<td>Program Modification: BS Biological Sciences-Biology: 3410</td>
<td>Approved</td>
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<td>44</td>
<td>Program Modification: BS Biological Sciences-Cellular, Molecular, and Developmental Biology: 3414</td>
<td>Approved</td>
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<td>45</td>
<td>Program Modification: BS Biological Sciences-Ecology, Evolution and Organismal Biology: 3409</td>
<td>Approved</td>
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<td>46</td>
<td>Program Modification: BS Biological Sciences-Secondary Education: 3412</td>
<td>Approved</td>
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<td>50</td>
<td>Program Addition: Professional Cert Real Estate</td>
<td>Approved</td>
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<td>47</td>
<td>Course Addition: REAL 350 Real Estate Fundamentals</td>
<td>Approved</td>
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<td>48</td>
<td>Course Addition: REAL 410 Real Estate Finance and Development</td>
<td>Approved</td>
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<td>49</td>
<td>Course Addition: REAL 415 Real Estate Valuation and Investment</td>
<td>Approved</td>
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<td>51</td>
<td>Course Addition: MATH 492 Senior Capstone</td>
<td>Approved</td>
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<td>Proposal</td>
<td>Committee Action</td>
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<tr>
<td>54</td>
<td>Course Modification: CSCI 112 CS2: Data Structures</td>
<td>Approved</td>
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<td></td>
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<td>Gurka, Lohse</td>
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<td></td>
<td></td>
<td>No discussion.</td>
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<tr>
<td>55</td>
<td>Course Modification: CSCI 130 Introduction to Engineering Computer Science</td>
<td>Approved contingent upon corrections</td>
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<td>Gurka, Lohse</td>
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<td></td>
<td>The committee requested that the affected programs (Minor, Computer Science and BS, Mathematics: Applied Mathematics) be added to the table of affected programs. Misspellings were corrected.</td>
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<tr>
<td>56</td>
<td>Course Modification: CSCI 310 Advanced Programming</td>
<td>Approved</td>
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<td>Gurka, Lohse</td>
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<td></td>
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<td>No discussion.</td>
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<tr>
<td>57</td>
<td>Course Modification: MATH 225 Computational Linear Algebra</td>
<td>Approved</td>
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<td>Gurka, Graham</td>
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<td></td>
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<td>No discussion.</td>
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<tr>
<td>58</td>
<td>Course Modification: MATH 325 Linear Algebra</td>
<td>Approved</td>
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<td>Gurka, Graham</td>
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<td>No discussion.</td>
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<tr>
<td>59</td>
<td>Course Modification: MATH 352 Advanced Calculus</td>
<td>Approved</td>
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<td>Gurka, Graham</td>
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<td></td>
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<td>No discussion.</td>
</tr>
<tr>
<td>60</td>
<td>Course Modification: MATH 420 Introduction to Topology</td>
<td>Approved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gurka, Graham</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No discussion.</td>
</tr>
<tr>
<td>61</td>
<td>Course Modification: MATH 452 Introduction to Real Analysis I</td>
<td>Approved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gurka, Graham</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No discussion.</td>
</tr>
<tr>
<td>62</td>
<td>Course Modification: MATH 453 Introduction to Real Analysis II</td>
<td>Approved contingent upon corrections</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gurka, Graham</td>
</tr>
<tr>
<td></td>
<td>The committee requested that &quot;no&quot; be selected for the row regarding whether or not the topical course outline will be changing.</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>Course Modification: MATH 490 Abstract Algebra I</td>
<td>Approved</td>
</tr>
<tr>
<td></td>
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<td>Gurka, Graham</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No discussion.</td>
</tr>
<tr>
<td>52</td>
<td>Course Deletion: MATH 415 Abstract Algebra for Secondary Education</td>
<td>Approved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No discussion.</td>
</tr>
<tr>
<td>Proposal</td>
<td>Committee Action Members</td>
<td>Effective Date</td>
</tr>
<tr>
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</tr>
<tr>
<td>53 Course Deletion: MATH 425 Computational Abstract Algebra</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>71 Program Modification: BA Liberal Arts-Elementary Education, Mathematics: 3491</td>
<td>Approved</td>
<td>Lani, Lohse</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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</tr>
<tr>
<td>65 Program Modification: BS Mathematics-Actuarial Science (New Program)</td>
<td>Approved</td>
<td>Lani, Lohse</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>66 Program Modification: BS Mathematics-Applied Mathematics: 3437</td>
<td>Approved</td>
<td>Lani, Lohse</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>64 Program Modification: BS Mathematics-Mathematics: 3424</td>
<td>Approved</td>
<td>Lani, Lohse</td>
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<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>70 Program Modification: BS Mathematics-Secondary Education: 3430</td>
<td>Approved</td>
<td>Lani, Lohse</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>70 Program Modification: BS Mathematics-Secondary Education: 3430</td>
<td>Approved</td>
<td>Lani, Lohse</td>
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<tr>
<td>Misspelling corrected.</td>
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<tr>
<td>67 Program Modification: BS Mathematics-Statistics: 3434</td>
<td>Approved</td>
<td>Lani, Lohse</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>68 Program Modification: Minor Computer Science: M450</td>
<td>Approved</td>
<td>Lani, Lohse</td>
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<td>No discussion.</td>
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<tr>
<td>69 Program Modification: Minor Mathematics: M460</td>
<td>Approved</td>
<td>Lani, Lohse</td>
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<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>72 Course Modification: CONM 234 Graphic Communication for Construction Management</td>
<td>Approved</td>
<td>Lani, Lohse</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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</tr>
<tr>
<td>73 Course Modification: ENGR 305 Engineering Economics and Ethics</td>
<td>Approved</td>
<td>Lani, Lohse</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>Proposal</td>
<td>Committee Action Members</td>
<td>Effective Date</td>
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<tr>
<td>75 Program Modification: AAS Mechanical Engineering Technology: 1453</td>
<td>Approved</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
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<tr>
<td>74 Program Modification: BS Mechanical Engineering Technology: 3453</td>
<td>Approved</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
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<tr>
<td>76 Course Modification: NURS 353 Foundation of Nursing Practice</td>
<td>Approved</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
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<tr>
<td>77 Course Modification: NURS 353L Foundations of Nursing Practice Clinical</td>
<td>Approved</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
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<tr>
<td>78 Course Modification: NURS 372 Professional Development I: Nursing Theory, Roles, and Ethics</td>
<td>Approved</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>79 Course Modification: NURS 373 Acute and Chronic Illness I</td>
<td>Approved</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>80 Course Modification: NURS 373L Acute and Chronic Illness I Clinical</td>
<td>Approved</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>81 Course Modification: NURS 388 Mental Health Nursing</td>
<td>Approved</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>82 Course Modification: NURS 388L Mental Health Nursing Clinical</td>
<td>Approved</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>83 Course Modification: NURS 394 Nursing Research: An Evidence-based Practice</td>
<td>Approved</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>84 Course Modification: NURS 472 Professional Development II: Health Informatics</td>
<td>Approved</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>85 Course Modification: NURS 473 Acute and Chronic Illness II</td>
<td>Approved</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>Typo corrected.</td>
<td></td>
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<tr>
<td>Proposal</td>
<td>Committee Action</td>
<td>Members</td>
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<tr>
<td>86 Course Modification: NURS 473L Acute and Chronic Illness II Clinical</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td>87 Course Modification: NURS 482 Professional Development III: The Professional Nurse</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td>88 Course Modification: NURS 487 Community and Population Nursing</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td>89 Course Modification: NURS 487L Community and Population Nursing Clinical</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td>90 Course Modification: NURS 490 Nursing Leadership and Management</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td>91 Course Modification: NURS 490L Nursing Leadership and Management Clinical</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
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<tr>
<td>92 Course Modification: NURS 493 Senior Capstone</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td>93 Course Modification: NURS 493L Senior Capstone Clinical</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
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<tr>
<td>94 Program Modification: BSN Nursing: 3611</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td>95 Program Modification: BSN Nursing-LPN to BSN: 3610</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td>96 Program Modification: BSN Nursing-RN to BSN: 3613</td>
<td>Approved</td>
<td>Elliott, Gurka</td>
</tr>
<tr>
<td>97 Program Modification: BA Kinesiology-K-12 Education: 3137</td>
<td>Approved</td>
<td>Gurka, Lohse</td>
</tr>
<tr>
<td>Proposal</td>
<td>Committee Action Members (motion/second)</td>
<td>Effective Date</td>
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<tr>
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<tr>
<td>98 Course Modification: ENGL 111 English Composition</td>
<td>Approved Graham, Lohse</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
<td></td>
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<tr>
<td>99 Course Modification: ENGL 112 English Composition</td>
<td>Approved Graham, Lohse</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>100 Program Modification: BA English-Secondary Education: 3213</td>
<td>Approved Gurka, Elliott</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
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<tr>
<td>101 Program Modification: BA Liberal Arts-Elementary Education, English: 3291</td>
<td>Approved Gurka, Elliott</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>102 Program Modification: BA Spanish-Secondary Education: 3248</td>
<td>Approved Gurka, Elliott</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>103 Program Modification: BME Music Education K-12: 3282</td>
<td>Approved Elliott, Gurka</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>104 Course Addition: ENVS 373 Climate Change Adaptation</td>
<td>Approved contingent upon corrections Elliott, Gurka</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>Varner noted that corrections were suggested for the course descriptions, but that these were not incorporated. This needs corrected.</td>
<td></td>
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<tr>
<td>105 Course Addition: ENVS 376 Ecological Design and Technology</td>
<td>Approved contingent upon corrections Elliott, Gurka</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>Varner noted that corrections were suggested for the course descriptions, but that these were not incorporated. This needs corrected. Typos were corrected.</td>
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<tr>
<td>106 Course Addition: ENVS 377 Systems Thinking in Environmental Science</td>
<td>Approved contingent upon corrections Elliott, Gurka</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>Varner noted that corrections were suggested for the course descriptions, but that these were not incorporated. This needs corrected.</td>
<td></td>
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<tr>
<td>107 Course Addition: PHYS 372 General Relativity</td>
<td>Approved Elliott, Gurka</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
<td></td>
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<tr>
<td>109 Course Modification: ENVS 212 Environmental Health and Safety</td>
<td>Approved Van Brussel, Elliott</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>Proposal</td>
<td>Committee Action Members</td>
<td>Effective Date</td>
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<tr>
<td>110 Course Modification: PHYS 252 Intermediate Laboratory</td>
<td>Approved Lanci, Elliott</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>111 Course Modification: PHYS 311 Electromagnetic Theory I</td>
<td>Approved Lanci, Elliott</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>112 Course Modification: PHYS 331 Advanced Laboratory I</td>
<td>Approved Lanci, Elliott</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>108 Course Deletion: ENVS 212L Environmental Health and Safety Laboratory</td>
<td>Approved Gurka, Elliott</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
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<tr>
<td>113 Program Modification: BS Environmental Science and Technology: 3443</td>
<td>Approved Gurka, Elliott</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
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<tr>
<td>116 Program Modification: BS Geosciences-Secondary Education: 3474</td>
<td>Approved Gurka, Elliott</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>114 Program Modification: BS Physics: 3471</td>
<td>Approved Gurka, Elliott</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>115 Program Modification: Prof Cert Sustainability Practices: 1464</td>
<td>Approved Gurka, Elliott</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
<td></td>
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<tr>
<td>117 Course Addition: ANTH 231 Survey of Biological Anthropology</td>
<td>Approved Lohse, Elliott</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>118 Course Addition: ANTH 231L Survey of Biological Anthropology Laboratory</td>
<td>Approved Lohse, Elliott</td>
<td>Fall 2019</td>
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<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>119 Course Addition: ANTH 341 Indigenous Cultures of North America</td>
<td>Approved Lohse, Elliott</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>Minor adjustment made to the course description per feedback from Johanna Varner.</td>
<td></td>
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<tr>
<td>123 Course Modification: FOAN 350 Forensic Anthropology</td>
<td>Approved Graham, Van Brussel</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>No discussion.</td>
<td></td>
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<tr>
<td>Proposal</td>
<td>Committee Action</td>
<td>Members</td>
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<tr>
<td>124</td>
<td>Course Modification: PSYC 430 Biopsychology</td>
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<td>No discussion.</td>
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<td>120</td>
<td>Course Deletion: ARKE 325 Geoarchaeology</td>
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<td></td>
<td>No discussion.</td>
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<tr>
<td>121</td>
<td>Course Deletion: FOAN 180 Survey of Physical Anthropology</td>
<td>Approved</td>
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<td>No discussion.</td>
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<tr>
<td>122</td>
<td>Course Deletion: FOAN 180L Survey of Physical Anthropology Laboratory</td>
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<td></td>
<td>No discussion.</td>
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<td>125</td>
<td>Program Modification: BA Applied Anthropology and Geology: 3780</td>
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<td></td>
<td>No discussion.</td>
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<td>130</td>
<td>Program Modification: BA History-Secondary Education: 3704</td>
<td>Approved</td>
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<td>No discussion.</td>
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<td>131</td>
<td>Program Modification: BA Liberal Arts-Elementary Education, Social Science: 3791</td>
<td>Approved</td>
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<td></td>
<td>No discussion.</td>
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<td>127</td>
<td>Program Modification: Minor Archaeology: M725</td>
<td>Approved</td>
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<td></td>
<td>No discussion.</td>
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<td>128</td>
<td>Program Modification: Minor Forensic Anthropology: M715</td>
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<td></td>
<td>No discussion.</td>
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<td>129</td>
<td>Program Modification: Minor Sociology: M750</td>
<td>Approved</td>
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<td></td>
<td>No discussion.</td>
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<td>126</td>
<td>Program Modification: Prof Cert Cultural Resource Management: 1710</td>
<td>Approved</td>
</tr>
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<td></td>
<td>No discussion.</td>
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<tr>
<td>132</td>
<td>Program Modification: BA Early Childhood Education-Special Education: 3204</td>
<td>Approved</td>
</tr>
<tr>
<td>Proposal</td>
<td>Committee Action Members</td>
<td>Effective Date</td>
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<tr>
<td>133 Course Modification: SPCH 112 Voice and Diction</td>
<td>Approved</td>
<td>Elliott, Graham</td>
</tr>
<tr>
<td>134 Course Modification: THEA 253 Acting III: Stage Movement</td>
<td>Approved</td>
<td>Elliott, Graham</td>
</tr>
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<td></td>
<td>The committee asked for clarification on whether the content needs changed along with the change in the course name. Van Brussel clarified that the change is not hierarchical. It just better reflects the order in which students take these acting courses.</td>
<td></td>
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<tr>
<td>135 Course Modification: THEA 256 Acting IV: Auditions</td>
<td>Approved</td>
<td>Elliott, Graham</td>
</tr>
<tr>
<td>136 Course Modification: THEA 360 Costume Construction II</td>
<td>Approved</td>
<td>Elliott, Graham</td>
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<tr>
<td></td>
<td>Check boxes were changed from &quot;no&quot; to &quot;yes&quot; regarding whether there are changes to the title and abbreviated title.</td>
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<tr>
<td>137 Course Modification: THEA 454 Advanced Acting: Elizabethan Acting Techniques</td>
<td>Approved</td>
<td>Elliott, Graham</td>
</tr>
<tr>
<td>138 Program Modification: BFA Dance: 3267</td>
<td>Approved</td>
<td>Gurka, Elliott</td>
</tr>
<tr>
<td>139 Program Modification: BFA Theatre Arts-Acting/Directing: 3265</td>
<td>Approved</td>
<td>Gurka, Elliott</td>
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<tr>
<td>140 Program Modification: BFA Theatre Arts-Music Theatre: 3266</td>
<td>Approved</td>
<td>Gurka, Elliott</td>
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<tr>
<td>141 Program Modification: Minor Communication Studies: M251</td>
<td>Approved</td>
<td>Gurka, Elliott</td>
</tr>
</tbody>
</table>
Department: Academic Affairs

Course Additions

UNIV 104
Credit Hours 1

Course Title: Beyond College Success
Abbreviated Title: Beyond College Success

Contact hours per week: Lecture 1 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 750 Student preparation minutes: 1500

Intended semesters for offering this course: Fall ☑ J-Term ☐ Spring ☑ Summer ☐

Intended semester to offer course 1st time: Fall 2019

Number of times course may be taken for credit: 1

Essential Learning Course: Yes ☑ No ☐

Prerequisites: Yes ☑ No ☐

UNIV 100
Prerequisite for other course(s): Yes ☑ No ☐

Co-requisites: Yes ☑ No ☐

Requirement or listed choice for any program of study: Yes ☑ No ☐

Overlapping content with present courses offered on campus: Yes ☑ No ☐

Additional faculty FTE required: Yes ☑ No ☐

Additional equipment required: Yes ☑ No ☐

Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:
Advanced college success skills to develop student independence and enhance personal and professional growth. Emphasis on self-discovery, practical application of success strategies, and implementation of an academic plan including co-curricular involvement and major/career goals.

Justification:
UNIV 104 will be offered for Provisional Baccalaureate students at CMU to assist in retaining these academically underprepared students. This course will provide an opportunity for Academic Success Coaches to keep students engaged during the second semester of their academic careers. It will help students in planning for the rest of their college experiences by connecting them with their academic departments, advancing their career planning, discussing academic involvement opportunities beyond the classroom and educating students about making good financial decisions as they move beyond the PB program. The course will help students build supportive communities with their peers and provide a more seamless transition as students meet requirements to move into bachelor's degree programs.

Topical course outline:
financial decision-making
career preparation
identifying personal strengths
Course Additions

developing grit
decision-making processes
major/career goal-setting
advanced study skills
co-curricular involvement

Student Learning Outcomes:

1. Construct major and career goals and list steps needed to achieve these goals.
2. List and explain information needed in financial decision-making.
3. Identify and engage in at least one co-curricular opportunity each semester.
4. Demonstrate effective time management, organizational and study strategies.
5. Record and evaluate personal academic development and growth.

Discussions with affected departments:
No other departments will be affected.

Proposed by: Erin Ward  
Expected Implementation: Fall 2019
**Course Modifications**

**UNIV 100**

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
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<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
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<tr>
<td>Credit Hours:</td>
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<tr>
<td>Course Title:</td>
<td>College Success Skills</td>
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<tr>
<td>Contact hours:</td>
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<tr>
<td></td>
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<td></td>
<td>Studio</td>
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<tr>
<td></td>
<td>Other</td>
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<tr>
<td>Engage Min.:</td>
<td>750</td>
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<tr>
<td>Prep Min.:</td>
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<td>Times for Credit:</td>
<td>1</td>
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**Requirement or listed choice for any program of study:** Yes ☐ No ☑

**Change affects program sheet or grad requirements:** Yes ☐ No ☑

**Justification:**

UNIV 100 is currently a 1-credit course that all Provisional Baccalaureate (PB) students are required to take during their first semester at CMU. A 1-credit course does not allow for enough time to convey the key "just in time" information that these academically-underprepared students need to be successful. In particular, PB students need much more exposure to information about study skills. As listed below, academic skills having to do with reading effectively, taking notes efficiently, test preparation and test-taking will be covered. As a result of needing to spend more time on key CMU technologies like MAVzone and D2L to help students navigate and manage their learning and academic progress more effectively, separate lessons on Microsoft Word and Excel will no longer be included in the course, but some key points may be incorporated into various assignments. In addition, instructors will work with students on exploring majors, communicating effectively, thinking critically, and developing a growth-mindset. With the inclusion of these new items into the course, instructors can help students more effectively when it comes to succeeding in their first-semester courses. Students will take UNIV 100 either for 2 hours a week throughout their first semester, or if they choose to participate in the MVP program, students will have class for 3 hours a day during the week before the semester begins and for one hour a week throughout their first semester.

**Topical course outline, current:**

PB program guidelines, understanding college expectations, email etiquette, campus resources, CMU academic policies, time management, navigating CMU technology such as MAVzone and D2L, financial literacy basics for college, goal-setting, motivation, and the basics for using Microsoft Word and Excel

**Topical course outline, proposed:**

PB program guidelines, understanding college expectations, email etiquette, campus resources, CMU academic policies, time management, navigating CMU technology such as MAVzone and D2L, financial literacy basics for college, goal-setting, motivation, reading, note-taking, memory, test preparation, major/career exploration, communication skills, cultivating a growth mindset, developing critical thinking skills, and developing a plan for academic success.

**Student Learning Outcomes, current:**

1. Demonstrate knowledge of academic policies and expectations for learning in a college environment
2. Utilize the different types of technology used in courses at CMU
Course Modifications

3. Have the knowledge to make good financial decisions
4. Identify and utilize the resources on campus available to assist them
5. Develop an Academic Success Plan that will include self-reflection, time management strategies and goals

Student Learning Outcomes, proposed:
1. Articulate academic policies and learning expectations in a college environment
2. Identify and utilize differing types of technology used in CMU courses
3. Identify and utilize campus resources available to students
4. Develop an Academic Success Plan that includes time management strategies
5. Apply effective college study skills (reading, note-taking, test preparation, memory techniques) to course assignments

Discussions with affected departments:
No other departments will be affected.

Proposed by: Erin Ward
Expected Implementation: Fall 2019
Department: Art and Design

Course Additions

ARTG 223
Credit Hours 3

Course Title: Commercial Typography and Sign Painting
Abbreviated Title: Commercial Type/Sign Painting

Contact hours per week: Lecture 1 Lab Field Studio 4 Other

Type of Instructional Activity: Art Studio

Academic engagement minutes: 3750
Student preparation minutes: 3000

Intended semesters for offering this course: Fall ☑ J-Term ☐ Spring ☑ Summer ☐

Intended semester to offer course 1st time: Spring 2020

Number of times course may be taken for credit: 1

Essential Learning Course: Yes ☑ No ☐

Prerequisites:
Yes ☑ No ☐

Prerequisite for other course(s): Yes ☑ No ☐

Co-requisites: Yes ☑ No ☐

Requirement or listed choice for any program of study: Yes ☑ No ☐

Overlapping content with present courses offered on campus: Yes ☑ No ☐

Additional faculty FTE required: Yes ☑ No ☐

Additional equipment required: Yes ☑ No ☐

Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:

Cultivation of skills necessary to create professional level industrial advertisement including pounce patterns, wood working, hand lettering techniques, and gilding.

Justification:

Commercial Typography/Sign Painting, in the Graphic Design program, was first offered in the Spring semester of 2017. The Art and Design Department has offered Commercial Typography/Sign Painting to design students in the form of topics courses since that time for a total of three offerings (as of Spring 2019). It is imperative that Graphic Design majors graduate with a portfolio that demonstrates relevant industry knowledge and production methods. Sign Painting as a craft/skill is more relevant today than ever based on a world-wide trend towards products created (and wanted) by hand. It is our desire to meet this demand by offering this course on a regular basis. The course is well received by students and the students’ portfolios are reflecting the integration.

Topical course outline:

1. The methods of hand lettering.
2. Creating tools for calligraphy and hand lettering.
3. The history of letter forms and letter anatomy.
4. Commercial applications for hand lettering including quotes and estimates for practical application and the discussion of ethics.
5. Processes surrounding gilding techniques.
6. Working on different surfaces for painted applications.
7. Drafting pounces and transfer methods to scale the work for larger applications.
Course Additions

8. Techniques and terminology associated with sign craft.

Student Learning Outcomes:
1. Create advanced drafts combining pictorial work and lettering.
2. Evaluate different commercial applications and scale of work for that application.
3. Create artwork from a beginning draft to the final finished product phase for a variety of multiple surfaces.
4. Calculate and quote cost of materials and labor for job bids using industry standards.
5. Evaluate the significance of the history and traditions of hand lettering, calligraphy, and typography.

Discussions with affected departments:
NA

Proposed by:  Suzie Garner  
Expected Implementation:  Fall 2019
Course Additions

ARTG 427

Credit Hours 1-3

Course Title: Lab Assistant

Abbreviated Title: Lab Assistant

Contact hours per week: Lecture .33-1

Field Studio Other 1.33-4

Type of Instructional Activity: Mixed Instruction Method

Academic engagement minutes: 1250-6750

Student preparation minutes: 1000-4500

Intended semesters for offering this course: Fall ☑ J-Term ☐ Spring ☐ Summer ☑

Intended semester to offer course 1st time: Fall 2019

Number of times course may be taken for credit: 3

Essential Learning Course: Yes ☑ No ☐

Prerequisites: Yes ☑ No ☐

Prerequisite for other course(s): Yes ☐ No ☑

Co-requisites: Yes ☑ No ☐

Requirement or listed choice for any program of study: Yes ☑ No ☐

Overlap content with present courses offered on campus: Yes ☑ No ☐

Additional faculty FTE required: Yes ☑ No ☐

Additional equipment required: Yes ☑ No ☐

Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:

Practice with technologies used within the Graphic Design labs. Maintain and use equipment.

Justification:

Currently the Graphic Design faculty have been using the ARTE 498 Studio Assistant and Teaching Aid course as an elective for Graphic Design majors. This results of a loss of credit hours generated in the Graphic Design program. To have a more accurate account of credit hours generated, the ARTG 427 Lab Assistant course is needed.

The contact hours were copied directly from the ARTE 498 Studio Assistant and Teaching Aid course that is essentially the same course with a different prefix. The Art and Design Department uses the various prefixes to distinguish between the different areas.

The Art and Design Department has technology that requires students to repeat levels in order to gain a high level of competence. (CNC, 3-D Printing, Letterpress, etc.)

Topical course outline:

1. Learn to use, operate and maintain: the BE2000 pneumatic paper cutter;
2. the Epson 7900 large format printer;
3. the Roland vinyl cutter;
4. the Chandler & Price letterpress;
5. the EazyRouter CNC; and
6. the Art & Design department’s 3D Printer.

Student Learning Outcomes:

1. Demonstrate application of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship (Applied Learning).
**Course Additions**

2. Receive and process digital print orders from the students in the visual design program. (Applied Learning)

3. Demonstrate maintenance, repair, care and troubleshooting for the equipment. (Applied Learning)

4. Maintain supply stock and manage supplies in all areas. (Applied Learning)

**Discussions with affected departments:**

NA

<table>
<thead>
<tr>
<th>Proposed by:</th>
<th>Expected Implementation:</th>
</tr>
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<tbody>
<tr>
<td>Eli Marco Hall</td>
<td>Fall 2019</td>
</tr>
</tbody>
</table>
Course Additions

ARTS 225

Credit Hours 3

Course Title: Introduction to Photography

Abbreviated Title: Introduction to Photography

Contact hours per week: Lecture 1 Lab Field Studio 4 Other

Type of Instructional Activity: Mixed Instruction Method

Academic engagement minutes: 3750 Student preparation minutes: 3000

Intended semesters for offering this course: Fall ☑ J-Term ☐ Spring ☑ Summer ☐

Intended semester to offer course 1st time: Fall 2019

Number of times course may be taken for credit: 1

Essential Learning Course: Yes ☑ No ☐

Prerequisites: Yes ☑ No ☐

Prerequisite for other course(s): Yes ☑ No ☐

Co-requisites: Yes ☑ No ☐

Requirement or listed choice for any program of study: Yes ☑ No ☐

Art and Design BFA, Art-Studio Art: 3272

Overlapping content with present courses offered on campus: Yes ☑ No ☐

ARTA 222 Principles of Photography is for the Animation, Film, Photography and Motion Design BFA and there is a large amount of similar material covered. The big difference is that the students enrolled in ARTS 225 Introduction to Photography will focus on creating a fine art portfolio, while the ARTA 222 Principles of Photography students will be working on creating a commercial portfolio.

Additional faculty FTE required: Yes ☑ No ☐

Additional equipment required: Yes ☑ No ☐

Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:

Exploration of photographic principles through the use of the digital single lens reflex camera.

Justification:

Students have shown interest art photography class beyond the beginning level, and the demand for it is high. Photography is used by all art majors in some form, especially in portfolio construction; therefore we are expanding the class out of the Animation major to make it available for Studio Art majors also.

We are creating the Studio Art Photo classes for the students that want to push their work more artistically and develop an art portfolio instead of a commercial portfolio.

Topical course outline:

1. Mastery of the different capabilities of the Digital Single Lens Reflex Camera
2. Understanding the relationship between shutter speed and aperture when working with the light that enters the camera.
3. Understanding photographic principles
4. Use of design in composition of photograph
5. Introduction to Adobe Lightroom, Bridge, and Photoshop
6. Introduction to history of photography as a medium

Student Learning Outcomes:

1. Communicate orally and in writing the capabilities of a Digital Single Lens Reflex Camera.
2. Choose correct aperture to creatively control depth of field
Course Additions

3. Choose correct shutter speed creatively to control blur and freeze
4. Compose an interesting and well-designed image as defined by the National Visual Arts Standards
5. Process images in Photoshop and print successfully
6. Demonstrate good practices in file management

Discussions with affected departments:
Art and Design September 21st, 2018. Favorable by all faculty.

Proposed by: Forrest Zerbe

Expected Implementation: Fall 2019

Edits to ARTS 225 as requested by committee:

New Course Description:
Exploration of digital photography through technical and creative skill development using the digital single lens reflex camera.

New topical course outline:
1. Mastery of the different capabilities of the Digital Single Lens Reflex Camera
2. Understanding the relationship between shutter speed and aperture when working with the light that enters the camera.
3. Understanding photographic principles
4. Use of design in composition of photograph
5. Introduction to Adobe Lightroom, Bridge, and Photoshop
6. Introduction to history of photography as a medium
7. Developing an artistic portfolio
Course Additions

ARTS 325  Credit Hours  3
Course Title: Intermediate Photography
Abbreviated Title: Intermediate Photography
Contact hours per week: Lecture 1 Lab Field Studio 4 Other
Type of Instructional Activity: Mixed Instruction Method
Academic engagement minutes: 3750 Student preparation minutes: 3000
Intended semesters for offering this course: Fall ☑ J-Term ☐ Spring ☑ Summer ☐
Intended semester to offer course 1st time: Fall 2019
Number of times course may be taken for credit: 1
Essential Learning Course: Yes ☑ No ☐
Prerequisites: Yes ☑ No ☐
ARTE 101 and ARTS 225
Prerequisite for other course(s): Yes ☑ No ☐
Co-requisites: Yes ☑ No ☐
Requirement or listed choice for any program of study: Yes ☑ No ☐
Overlapping content with present courses offered on campus: Yes ☑ No ☐
ARTA 322 Principles of Photography is for the Animation, Film, Photography and Motion Design BFA and there is a large amount of similar material covered. The primary difference is that the students enrolled in ARTS 225 Introduction to Photography will focus on creating a fine art portfolio, while the ARTA 322 Principles of Photography students will be working on creating a commercial portfolio.
Additional faculty FTE required: Yes ☑ No ☐
Additional equipment required: Yes ☑ No ☐
Additional lab facilities required: Yes ☑ No ☐
Course description for catalog:
Discovery of vision and the art of seeing through the lens of a camera.
Justification:
Students have shown interest in photography and the demand for it is high. We are creating the Studio Art Photo classes for the students that want to push their work more artistically and develop an art portfolio instead of a commercial portfolio (which is what they create for the AFP&MD degree). Photography knowledge is vital to all art majors in some form, especially in portfolio construction; therefore we are expanding the class out of just the AFP&MD major to make it available for Studio Art majors also. Also, if students just enrolled in the AFP&MD department's photo class, then the Studio Art department's would not get the benefit of those enrollment numbers when it comes to things like hiring requests.
Topical course outline:
1. Students will learn basic digital SLR camera controls and the fundamentals of file management and digital imaging software through theory and practice.
2. Students will be introduced to contemporary technical, conceptual, and aesthetic trends in fine art advertising, and editorial photography.
3. Students will gain knowledge of the vocabulary of art criticism.
Student Learning Outcomes:
1. Interpret and critique personal artworks and the artwork of other artists.
2. Develop studio skills and personal art processes, qualities and techniques at the advanced level.
Course Additions

3. Apply traditional and new technologies within the photographic process.

Discussions with affected departments:
Art and Design September 21st, 2018. Favorable by all faculty.

Proposed by: Forrest Zerbe

Expected Implementation: Fall 2019

Edits to ARTS 325 as requested by committee:

New Course Description:
Development and discovery of individual artistic vision through the use of film photography.

New topical course outline:
1. Students will learn basic digital SLR camera controls and the fundamentals of file management and digital imaging software through theory and practice.
2. Students will be introduced to contemporary technical, conceptual, and aesthetic trends in fine art photography.
3. Students will gain knowledge of the vocabulary of art criticism.
4. Students will continue to develop an individual artistic portfolio.
Course Additions

ARTS 335
Credit Hours 3
Course Title: Digital Alternative Processes
Abbreviated Title: Digital Alternative Processes
Contact hours per week: Lecture 1 Lab Field Studio 4 Other
Type of Instructional Activity: Mixed Instruction Method
Academic engagement minutes: 3750 Student preparation minutes: 3000
Intended semesters for offering this course: Fall ☑ J-Term ☐ Spring ☑ Summer ☐
Intended semester to offer course 1st time: Fall 2019
Number of times course may be taken for credit: 1
Essential Learning Course: Yes ☑ No ☐
Prerequisites: Yes ☑ No ☐
ARTS 325
Prerequisite for other course(s): Yes ☑ No ☐
Co-requisites: Yes ☑ No ☐
Requirement or listed choice for any program of study: Yes ☑ No ☐
Overlapping content with present courses offered on campus: Yes ☑ No ☐
Additional faculty FTE required: Yes ☑ No ☐
Additional equipment required: Yes ☑ No ☐
Additional lab facilities required: Yes ☑ No ☐
Course description for catalog:
Exploration of fine art print making using digital photographic processes that contains a hands on element through continuation of digital photography studies.

Justification:
Photography is an integral part of a fine arts program. Students have shown interest in the medium and the demand for it is high. Photogrpahy is used by all art majors in some form, ex: portfolio construction.

Topical course outline:
1. Materials and Techniques
2. Creation of the Digital Negative
3. Modifying and distorting
4. Transfer medium and mixed media
5. 3D printing and the image

Student Learning Outcomes:
1. Construct imagery using digital platforms outputed to be used with analog manipulation.
2. Interprtit the language used by digital artist.
3. Create digital negatives to be used in analog printing.

Discussions with affected departments:
Art and Design September 21st, 2018. Favorable by all faculty.

Proposed by: Forrest Zerbe
Expected Implementation: Fall 2019
ARTS 336

Course Title: Photography Workshop I
Abbreviated Title: Photography Workshop I
Contact hours per week: Lecture 1 Lab Field Studio 4 Other
Type of Instructional Activity: Mixed Instruction Method
Academic engagement minutes: 3750 Student preparation minutes: 3000
Intended semesters for offering this course: Fall J-Term Spring Summer
Intended semester to offer course 1st time: Fall 2019
Number of times course may be taken for credit: 1
Essential Learning Course: Yes No ☑
Prerequisites: Yes ☑ No ☐
ARTS 335
Prerequisite for other course(s): Yes No ☑
Co-requisites: Yes No ☑
Requirement or listed choice for any program of study: Yes No ☑
Overlapping content with present courses offered on campus: Yes No ☑
Additional faculty FTE required: Yes No ☑
Additional equipment required: Yes No ☑
Additional lab facilities required: Yes No ☑
Course description for catalog:

Advanced development of personal vision and style through the lens of a camera.

Justification:

Photography is an integral part of a fine arts program. Students have shown interest in the medium and the demand for it is high. Photography is used by all art majors in some form, ex: portfolio construction.

Topical course outline:

1. Mastery of Single Lens Reflex camera
2. Further study of photographic design elements
3. Development of visual voice

Student Learning Outcomes:

1. Demonstrate mastery of both film and digital SLR cameras.
2. Use the Piezography method to create black and white images.
3. Recognize that informed discussion of art is an essential component of their art education.

Discussions with affected departments:

Art and Design September 21st, 2018. Favorable by all faculty.

Proposed by: Forrest Zerbe

Expected Implementation: Fall 2019
Course Additions

ARTS 425
Credit Hours 3

Course Title: Advanced Studio Photography
Abbreviated Title: Advanced Studio Photography
Contact hours per week: Lecture 1 Lab Field Studio 4 Other
Type of Instructional Activity: Mixed Instruction Method

Academic engagement minutes: 3750 Student preparation minutes: 3000

Intended semesters for offering this course: Fall ✔ J-Term □ Spring ✔ Summer □
Intended semester to offer course 1st time: Fall 2019
Number of times course may be taken for credit: 1

Essential Learning Course: Yes □ No ✔
Prerequisites: Yes ✔ No □

ARTS 325
Prerequisite for other course(s): Yes □ No ✔
Co-requisites: Yes □ No ✔

Requirement or listed choice for any program of study: Yes □ No ✔

Overlapping content with present courses offered on campus: Yes ✔ No □

ARTA 422 Principles of Photography is for the Animation, Film, Photography and Motion Design BFA and there is a large amount of similar material covered. The primary difference is that the students enrolled in ARTS 425 Introduction to Photography will focus on creating a fine art portfolio, while the ARTA 422 Principles of Photography students will be working on creating a commercial portfolio.

Additional faculty FTE required: Yes □ No ✔
Additional equipment required: Yes □ No ✔
Additional lab facilities required: Yes □ No ✔

Course description for catalog:

Exploration of light and the development of a studio lighting portfolio.

Justification:

Students have shown interest in photography and the demand for it is high. We are creating the Studio Art Photo classes for the students that want to push their work more artistically and develop an art portfolio instead of a commercial portfolio (which is what they create for the AFP&MD degree). Photography knowledge is vital to all art majors in some form, especially in portfolio construction; therefore we are expanding the class out of just the AFP&MD major to make it available for Studio Art majors also. Also, if students just enrolled in the AFP&MD department's photo class, then the Studio Art department's would not get the benefit of those enrollment numbers when it comes to things like hiring requests.

Topical course outline:

1. Mastering the control of studio lighting.
2. Using controlled lighting to create an image that meets professionally assigned goals.
3. Using available light to its fullest potential.

Student Learning Outcomes:

1. Utilize studio lighting to artistically light subjects.
2. Utilize available light creatively.
3. Integrate research and the study of light to create drawings as defined by Sir Henry Fox Talbot.
4. Construct a body of work that demonstrates professional lighting techniques.
Course Additions

Discussions with affected departments:
Art and Design September 21st, 2018. Favorable by all faculty.

Proposed by: Forrest Zerbe
Expected Implementation: Fall 2019

Edits to ARTS 425 as requested by committee:

New Course Description:
Further exploration of light and individual artistic vision through the use of digital photography.

New topical course outline:
1. Mastering the control of studio lighting.
2. Using controlled lighting to create an image that meets professionally assigned goals.
3. Using available light to its fullest potential.
4. Further development of an individual artistic portfolio.
Course Additions

ARTS 435
Credit Hours 3

Course Title: Wet Alternative Processes
Abbreviated Title: Wet Alternative Processes

Contact hours per week:
- Lecture 1
- Lab
- Field
- Studio 4
- Other

Type of Instructional Activity: Mixed Instruction Method

Academic engagement minutes: 3750
Student preparation minutes: 3000

Intended semesters for offering this course:
- Fall ☑
- J-Term ☐
- Spring ☑
- Summer ☐

Intended semester to offer course 1st time: Fall 2019

Number of times course may be taken for credit: 1

Essential Learning Course: Yes ☑ No ☐
Prerequisites: Yes ☑ No ☐

ARTS 335
Prerequisite for other course(s): Yes ☑ No ☐
Co-requisites: Yes ☑ No ☐

Requirement or listed choice for any program of study: Yes ☑ No ☐

Overlapping content with present courses offered on campus: Yes ☑ No ☐

Additional faculty FTE required: Yes ☑ No ☐
Additional equipment required: Yes ☑ No ☐
Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:

Exploration of fine art print making using wet alternative photographic processes that contains a hands on element.

Justification:

Photography is an integral part of a fine arts program. Students have shown interest in the medium and the demand for it is high. Photography is used by all art majors in some form, ex: portfolio construction.

Topical course outline:

1. Materials and Techniques
2. Liquid Emulsion
3. Transfers and Lifts
4. Cyanotypes
5. Kallitypes and Van Dyke
6. Tintypes

Student Learning Outcomes:

1. Understand how to used digital negatives to create wet process prints.
2. Understand current trends in fine art alternative processes.
3. Exhibit a portfolio of prints in the techniques of fine art alternative process.

Discussions with affected departments:

Art and Design September 21st, 2018. Favorable by all faculty.

Proposed by: Forrest Zerbe
Expected Implementation: Fall 2019
Course Additions

ARTS 436  
Credit Hours  3

Course Title:  Photography Workshop II
Abbreviated Title:  Photography Workshop II

Contact hours per week:  
Lecture  1  Lab  Field  Studio  4  Other

Type of Instructional Activity:  Mixed Instruction Method

Academic engagement minutes: 3750  
Student preparation minutes: 3000

Intended semesters for offering this course:  
Fall  Yes  J-Term  No  Spring  Yes  Summer  No

Intended semester to offer course 1st time:  Fall 2019

Number of times course may be taken for credit:  1

Essential Learning Course:  Yes  No  ✓

Prerequisites:  Yes  No  ✓

Prerequisite for other course(s):  Yes  No  ✓

Co-requisites:  Yes  No  ✓

Requirement or listed choice for any program of study:  Yes  No  ✓

Overlapping content with present courses offered on campus:  Yes  No  ✓

Additional faculty FTE required:  Yes  No  ✓

Additional equipment required:  Yes  No  ✓

Additional lab facilities required:  Yes  No  ✓

Course description for catalog:
Advanced development of personal vision and style through the lens of a camera and creation of prints.

Justification:
Photography is an integral part of a fine arts program. Students have shown interest in the medium and the demand for it is high.Photography is used by all art majors in some form, ex: portfolio construction.

Topical course outline:
1. Mastery of chosen photographic direction.
2. Constructive criticism of imagery.

Student Learning Outcomes:
1. Critically and constructively critique imagery.
2. Construct a professional portfolio based on photographic research.
3. Recognize that learning about the visual arts is a life-long endeavor and is a valuable component of human experience.

Discussions with affected departments:
Art and Design September 21st, 2018. Favorable by all faculty.

Proposed by:  Forrest Zerbe  
Expected Implementation:  Fall 2019

Edits to ARTS 436 as requested by committee:

New SLOs:
1. Critically and constructively critique imagery.
2. Construct a professional portfolio based on photographic research.
3. Demonstrate development in chosen photographic direction.
Course Additions

ARTS 275
Credit Hours 3
Course Title: Printmaking: Screen Printing and Lithography
Abbreviated Title: Printmaking Screen & Litho
Contact hours per week: Lecture 1 Lab Field Studio 4 Other
Type of Instructional Activity: Mixed Instruction Method
Academic engagement minutes: 3750 Student preparation minutes: 3000
Intended semesters for offering this course: Fall □ J-Term □ Spring ☑ Summer □
Intended semester to offer course 1st time: Spring 2020
Number of times course may be taken for credit: 1
Essential Learning Course: Yes ☑ No □
Prerequisites: Yes ☑ No □
Prerequisite for other course(s): Yes ☑ No □
Co-requisites: Yes ☑ No □
Requirement or listed choice for any program of study: Yes ☑ No □
Art and Design BA, Studio Art: 3277
Art and Design BFA, Art-Studio Art: 3272
Art and Design BFA, Art-K-12 Education: 3270
Overlapping content with present courses offered on campus: Yes ☑ No □
Additional faculty FTE required: Yes ☑ No □
Additional equipment required: Yes ☑ No □
Additional lab facilities required: Yes ☑ No □
Course description for catalog:
Introduction to the techniques, concepts, and history of screen print and lithography printmaking processes. Screen printing techniques include experimental monoprint, multiple color registration, and photo emulsion. Lithography techniques include black and white and multiple color printing from stone and photo plates. Emphasis will be placed on technical development, concept and idea generation, craftsmanship, and studio participation.
Justification:
Currently the lithography (ARTS 370) and screenprinting (ARTS 270) techniques are taught in separate courses. This creates several problems: 1) students rarely have enough elective credits to take both courses on top of the required studio art courses so each class remains low enrolled. 2) because of this, students miss out on some important technical development in their understanding of printmaking. Combining the two courses into one course (ARTS 275) will solve both problems. Conversely, I will not be able to get as technically in depth as I would with the courses separate, but students who would like more in depth instruction can take the advanced sections in future semesters.
Topical course outline:
Practices involving studio participation, craftsmanship, ideation, and individual concept development are all embedded in each technical project listed below.

History of Lithography, lithography projects include: Basic stone lithography, basic color stone lithography, basic positive photo plate lithography.

History of Screen print, Screen print projects include: Monoprinting with screens, reductive color
Course Additions

printing, additive color printing with photo emulsion.

Student Learning Outcomes:

Course Learning Objectives:
1. Demonstrate understanding of basic water based screen print techniques including monoprint, screen filler, photo emulsion.
2. Demonstrate understanding of basic stone and photo plate lithography.
3. Demonstrate understanding of multiple color registration techniques for both screen and lithography processes.
4. Demonstrate personalized creative concepts.
5. To demonstrate safe use of lithography and Screen-printing tools and equipment.
6. Use of photo emulsions, exposure units, and washout stations.
7. Demonstrate understanding of studio art professionalism.
8. Attendance and involvement, timely completion of projects, participation in group critiques.

Discussions with affected departments:

NA

Proposed by: Joshua Butler

Expected Implementation: Fall 2019

Edits to ARTS 275 as requested by committee:

Revised SLOs:
1. Demonstrate basic water based screen-print techniques including Monoprint, screen filler, photo emulsion.
2. Demonstrate basic stone and photo plate lithography.
3. Demonstrate multiple color registration techniques for both screen and lithography processes.
4. Demonstrate personalized creative concepts.
5. Demonstrate safe use of lithography and Screen-printing tools and equipment including the use of photo emulsions, exposure units, and washout stations.
6. Demonstrate studio art professionalism including attendance and involvement, timely completion of projects, and participation in group critiques.
**Course Additions**

**ARTS 376**

Course Title: Printmaking: Advanced Intaglio and Relief

Abbreviated Title: Advanced Intaglio and Relief

Contact hours per week: Lecture 1, Lab, Field, Studio 4, Other

Type of Instructional Activity: Art Studio

Academic engagement minutes: 3750, Student preparation minutes: 3000

Intended semesters for offering this course: Fall, J-Term, Spring, Summer

Intended semester to offer course 1st time: Fall 2019

Number of times course may be taken for credit: 1

Essential Learning Course: Yes

Prerequisites: Yes

Prerequisite for other course(s): Yes

Co-requisites: Yes

Requirement or listed choice for any program of study: Yes

Overlapping content with present courses offered on campus: Yes

Additional faculty FTE required: Yes

Additional equipment required: Yes

Additional lab facilities required: Yes

*Course description for catalog:*

Advanced intaglio and relief techniques, history, and concepts will be explored. These will include monoprinting, mezzotint, and various digital technologies and techniques such as CNC (computer navigated control) routing, and kento registration techniques. Research projects into other printmaking techniques will be done on individual basis. Emphasis will be on demonstration of technical development, conceptual growth, craftsmanship, and studio participation.

*Justification:*

The list of intaglio and relief printmaking techniques are almost endless and keep growing as technology advances. There is certainly not enough time in the basic course to touch on everything that is important. This course will allow further technical development for students who wish to focus on more advanced techniques. It will also give me a space to include the use of digital and post digital technology into my curriculum using the CNC (computer navigated control) router and other technologies the department may acquire in the future (laser cutter).

*Topical course outline:*

The history and concepts are embedded into each of the technical projects. Projects will include: monoprinting, mezzotint, digital printmaking, color relief printmaking using kento registration, and technical research project.

*Student Learning Outcomes:*

1. To demonstrate advanced understanding of advanced intaglio and relief techniques including but not limited to monoprint, mezzotint, digital printmaking, kento registration.
2. Present research into another advanced printmaking technique.
3. Demonstrate personalized creative concepts.
4. To demonstrate safe use of intaglio and relief equipment.
Course Additions

5 To demonstrate understanding of studio art professionalism.
6 Attendance and involvement, timely completion of projects, participation in group critiques.

Discussions with affected departments:
NA

Proposed by: Joshua Butler

Expected Implementation: Fall 2019

Edits to ARTS 376 as requested by committee:

New SLOs:
1. Demonstrate understanding of advanced intaglio and relief techniques such as monoprint, mezzotint, digital printmaking, kento registration.
2. Present research orally and in writing on another advanced printmaking technique.
3. Demonstrate personalized creative concepts in the execution of projects created.
4. Demonstrate the safe use of intaglio and relief equipment.
5. Demonstrate studio art professionalism including attendance and involvement, timely completion of projects, and participation in group critiques.
Course Additions

ARTS 476

Course Title: Printmaking: Portfolio Development

Abbreviated Title: Printmaking: Portfolio Develop

Contact hours per week: Lecture Lab Field Studio 2 Other

Type of Instructional Activity: Art Studio

Academic engagement minutes: 1500 Student preparation minutes: 750

Intended semesters for offering this course: Fall ☑ J-Term ☑ Spring ☑ Summer ☐

Intended semester to offer course 1st time: Fall 2019

Number of times course may be taken for credit: 4

Essential Learning Course: Yes ☑ No ☐

Prerequisites: Yes ☑ No ☐

ARTS 371

Prerequisite for other course(s): Yes ☑ No ☐

Co-requisites: Yes ☑ No ☐

Requirement or listed choice for any program of study: Yes ☑ No ☐

Overlapping content with present courses offered on campus: Yes ☑ No ☐

Additional faculty FTE required: Yes ☑ No ☐

Additional equipment required: Yes ☑ No ☐

Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:

Development of a professional body of artwork that demonstrates technical, creative, and conceptual maturity. Students will design, implement, and assess their own creative research goals under the tutelage of the professor. Artwork will be photographed and presented in a portfolio with the intention of entering the art profession. The course may be repeated for credit.

Justification:

This is a one credit advanced studio art course that is intended for students who need more time and access to studio resources to learn new techniques and continue to develop a body of artwork. Occasionally students need just one more upperdivision credit to complete their graduation requirements. Other's want to return after graduation to continue their creative work. (This is most often the case. I have non-trad students who are professional and emerging artists who have taken this course for several years. The CMU print shop is one of the only fully functional printmaking studios between Denver and Salt Lake City. Offering this one credit course allows artists the opportunity to come and learn new techniques, develop their portfolio's, and be a valued addition to CMU's art undergrads.) I have taught this course for years as a topics course and it is time that it was made into an official class.

Topical course outline:

Individual technical, creative, and conceptual development artwork within the discipline of the printmaking arts and under the tutelage of the professor. Artwork will be photographed and presented as a part of a professional portfolio.

Student Learning Outcomes:

Demonstrate the ability to design, implement, and assess the success of a personal creative direction. Demonstrate the ability to photograph and present the artwork in a professional manner.
Course Additions

Discussions with affected departments:
NA

Proposed by:  Joshua Butler  Expected Implementation:  Fall 2019

Edits to ARTS 476 as requested by committee:

New SLOs:
1. Demonstrate the design, implementation, and assessment of a personal creative direction.
2. Demonstrate the knowledge to photograph and present the artwork in a professional manner in a final portfolio.
**Course Deletions**

**ARTG 339**

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>3</th>
</tr>
</thead>
</table>

**Course Title:** Advertising Design

**Essential Learning Course:** Yes [ ] No [X] ✓

**Requirement or listed choice for any program of study:** Yes [ ] No [X] ✓

**Prerequisite for other course(s):** Yes [ ] No [X] ✓

**Co-requisite for other course(s):** Yes [ ] No [X] ✓

**Justification:**
This course has always been offered as an elective and is cross-listed with ARTG 338 Advertising Design I. The Graphic Design faculty have decided to allow ARTG 338 to be offered more than once instead of taking ARTG 339. The Department is trying to remove some cross-listed classes to make advising easier. The ability to take ARTG 338 more than once will make it easier for the students to understand, and more manageable for the professors.

**Proposed by:** Eli Marco Hall

**Expected Implementation:** Fall 2019
## Course Deletions

**ARTS 110**  
**Credit Hours:** 3

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>Digital Photography</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Yes</td>
</tr>
<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes</td>
</tr>
<tr>
<td>Art and Design  BFA,  Art-K-12 Education:</td>
<td>3270</td>
</tr>
<tr>
<td>Prerequisite for other course(s):</td>
<td>Yes</td>
</tr>
<tr>
<td>Co-requisite for other course(s):</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Justification:**
ARTS 110 Digital Photography was found to be intensive of a class for a 100 level, so it is being changed into a 200 level class instead of removing material. We are deleting ARTS 110 Digital Photography to be replaced by ARTS 225 Introduction to Photography, where the same material will be covered.

**Proposed by:** Forrest Zerbe  
**Expected Implementation:** Fall 2019
### Course Deletions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credit Hours</th>
<th>Course Title</th>
<th>Essential Learning Course</th>
<th>Requirement or listed choice for any program of study</th>
<th>Prerequisite for other course(s)</th>
<th>Co-requisite for other course(s)</th>
<th>Justification</th>
<th>Proposed by</th>
<th>Expected Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 270</td>
<td>3</td>
<td>Screen Printing I</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, No</td>
<td>Yes</td>
<td>Most of the content of this course will now be taught in ARTS 275: Printmaking Screenprinting and Lithography which will include the basic printmaking techniques of this course (ARTS 270) and lithography (ARTS 370).</td>
<td>Josh Butler</td>
<td>Fall 2019</td>
</tr>
</tbody>
</table>
Course Deletions

ARTS 460

Credit Hours 3

Course Title: Sketchbook II

Essential Learning Course: Yes ☑ No

Requirement or listed choice for any program of study: Yes ☑ No

Prerequisite for other course(s): Yes ☑ No

Co-requisite for other course(s): Yes ☑ No

Justification:

We are enabling students to take the ARTS 360 Sketchbook for credit multiple times, this will eliminate the need for the ARTS 460 Sketchbook II. There is no reason to offer a second level of the course if students can take a course repeatedly for credit and not grade improvement.

When you allow a student to take a course multiple times for credit, this allows majors to easily fulfill their elective credits.

There is precedence in other programs such as Music and Dance where a class is offered more than once for credit for students who are continuing to develop their technical skills in a particular area. Allowing students to repeat these courses will give them an opportunity to continue to develop their specialty skills in each content area. Each time a student repeats the course, they gain more exposure and practice. Thus students will advance their skills, which happens in all creative fields such as writing, art, music, etc.

Changing the Prefix on this course will eliminate the ability of studio art students to take the course. Since it is a requirement for Graphic Design majors, there is not room in the course for those students. This change will force the studio art students into other studio art course work and this will help enrollment numbers for the studio art courses.

Proposed by: Suzie Garner

Expected Implementation: Fall 2019
Course Modifications

ARTE 101

<table>
<thead>
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<th>Current</th>
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<tbody>
<tr>
<td>Course Prefix: ARTE</td>
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<tr>
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<td>101</td>
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<tr>
<td>Credit Hours: 3</td>
<td>3</td>
</tr>
<tr>
<td>Course Title: Two-Dimensional Design</td>
<td>Two-Dimensional Design</td>
</tr>
<tr>
<td>Times for Credit: 1</td>
<td>1</td>
</tr>
</tbody>
</table>

Description for catalog:

**Current:** The principles of form and function in two-dimensional design with emphasis on color theory and use.

**Proposed:** Introduction to the design process using the elements and principles of art with an emphasis on composition, mark making, color theory, and craftsmanship.

Requirement or listed choice for any program of study: Yes ☑ No □

Change affects program sheet or grad requirements: Yes ☑ No □

Art and Design BFA, Animation, Film, Photography and Motion Design: 3284
Art and Design BFA, Art-Studio Art: 3272
Art and Design BFA, Art-Art History: 3275
Art and Design BFA, Art-K-12 Education: 3270
Art and Design BFA, Graphic Design-Visual Design: 3274
Art and Design BA, Studio Art: 3277
Art and Design Minor, Studio Art: M200
Art and Design Minor, Graphic Design: M201

Justification:

Art and Design faculty wanted to update the current catalog description to make it more clear for students on what the class covers.

Discussions with affected departments:

Discussed at several faculty meetings over the Fall 2018 semester.

Proposed by: Eric Elliott
Expected Implementation: Fall 2019
**Course Modifications**

ARTG 321

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
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</thead>
<tbody>
<tr>
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<tr>
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<td>321</td>
</tr>
<tr>
<td>Credit Hours:</td>
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<tr>
<td>Course Title:</td>
<td>Advanced Typography</td>
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<td>Times for Credit:</td>
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<tr>
<td>Requirement or listed choice for any program of study:</td>
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<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes</td>
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</tbody>
</table>

Art and Design  BFA,  Graphic Design-Visual Design:  3274
Art and Design  Minor,  Graphic Design:  M201

**Justification:**
Modifying ARTG 321 Advanced Typography to be taken more than one time for credit will allow majors to more easily fulfill the elective credits while allowing the Graphic Design Program to delete classes that were previously cross-listed to serve the same purpose. There is precedence in other programs such as Music and Dance where a class is offered more than once for credit for students who are continuing to develop their technical skills in a particular area. Allowing students to repeat these courses will give them an opportunity to continue to develop their specialty skills in each content area. Each time a student repeats the course, they gain more exposure and practice. Thus students will advance their skills, which happens in all creative fields such as writing, art, music, etc.

**Discussions with affected departments:**
N/A

Proposed by:  Eli Marco Hall  
Expected Implementation:  Fall 2019
Course Modifications

ARTG 338

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
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<tbody>
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<tr>
<td>Course No.:</td>
<td>338</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
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<tr>
<td>Course Title:</td>
<td>Advertising Design I</td>
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<tr>
<td>Abbreviated Title:</td>
<td>Advertising Design I</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes</td>
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<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes</td>
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<tr>
<td>Art and Design  BFA, Graphic Design-Visual Design:</td>
<td>3274</td>
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<tr>
<td>Art and Design  Minor, Graphic Design:</td>
<td>M201</td>
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</tbody>
</table>

Justification:
Changing the title is a result of deleting ARTG 339 Advertising Design.

Modifying ARTG 338 Advertising Design I to be taken more than one time for credit will allow majors to more easily fulfill the elective credits while allowing the Graphic Design Program to delete classes that were previously cross-listed to serve the same purpose. There is precedence in other programs such as Music and Dance where a class is offered more than once for credit for students who are continuing to develop their technical skills in a particular area. Allowing students to repeat these courses will give them an opportunity to continue to develop their specialty skills in each content area. Each time a student repeats the course, they gain more exposure and practice. Thus students will advance their skills, which happens in all creative fields such as writing, art, music, etc.

Discussions with affected departments:
N/A

Proposed by: Eli Marco Hall

Expected Implementation: Fall 2019
## Course Modifications

**ARTG 373**

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<tbody>
<tr>
<td>Course Prefix:</td>
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<td>Course No.:</td>
<td>373</td>
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<tr>
<td>Credit Hours:</td>
<td>3</td>
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<tr>
<td>Course Title:</td>
<td>Screen Printing for Graphic Design</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
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<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes</td>
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<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes</td>
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</table>

**Justification:**

Modifying ARTG 373 Screen Printing for Graphic Design to be taken more than one time for credit will allow majors to more easily fulfill the elective credits while allowing the Graphic Design Program to delete classes that were previously cross-listed to serve the same purpose. Previously, we had used topics courses for students who wanted to pursue further study in this area, but since we have offered the topics class more than twice this is a way to avoid having to create a whole new class, syllabus, SLOs, etc for a class that is essentially the same except for the students level of technical proficiency. There is precedence in other programs such as Music and Dance where a class is offered more than once for credit for students who are continuing to develop their technical skills in a particular area. Allowing students to repeat these courses will give them an opportunity to continue to develop their specialty skills in each content area. Each time a student repeats the course, they gain more exposure and practice. Thus students will advance their skills, which happens in all creative fields such as writing, art, music, etc.

**Discussions with affected departments:**

N/A

**Proposed by:** Eli Marco Hall  
**Expected Implementation:** Fall 2019
Course Modifications

ARTG 406

Intended semester to offer modified course for the 1st time: Fall 2019

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<tr>
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<tr>
<td>Credit Hours:</td>
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<td>Course Title:</td>
<td>UX Design</td>
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<td>Times for Credit:</td>
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<td>Requirement or listed choice for any program of study:</td>
<td>Yes</td>
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<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes</td>
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</table>

Art and Design  BFA,  Graphic Design-Visual Design: 3274

Justification:
Modifying ARTG 406 UX Design to be taken more than one time for credit will allow majors to more easily fulfill the elective credits while allowing the Graphic Design Program to delete classes that were previously cross-listed to serve the same purpose. Previously, we had used topics courses for students who wanted to pursue further study in this area, but since we have offered the topics class more than twice this is a way to avoid having to create a whole new class, syllabus, SLOs, etc for a class that is essentially the same except for the students level of technical proficiency. There is precedence in other programs such as Music and Dance where a class is offered more than once for credit for students who are continuing to develop their technical skills in a particular area. Allowing students to repeat these courses will give them an opportunity to continue to develop their specialty skills in each content area. Each time a student repeats the course, they gain more exposure and practice. Thus students will advance their skills, which happens in all creative fields such as writing, art, music, etc.

Discussions with affected departments:
N/A

Proposed by: Eli Marco Hall  Expected Implementation: Fall 2019
Course Modifications

ARTG 421

Intended semester to offer modified course for the 1st time: Fall 2019

| Current | | Proposed |
|---------| | |
| Course Prefix: | ARTG | |
| Course No.: | 421 | |
| Credit Hours: | 3 | |
| Course Title: | Contemporary Letterpress | |
| Times for Credit: | 2 | 3 |
| Requirement or listed choice for any program of study: | Yes | No |
| Change affects program sheet or grad requirements: | Yes | No |

Justification:
Modifying ARTG 421 Contemporary Letterpress to be taken more than one time for credit will allow majors to more easily fulfill the elective credits while allowing the Graphic Design Program to delete classes that were previously cross-listed to serve the same purpose. Previously, we had used topics courses for students who wanted to pursue further study in this area, but since we have offered the topics class more than twice this is a way to avoid having to create a whole new class, syllabus, SLOs, etc for a class that is essentially the same except for the students level of technical proficiency. There is precedence in other programs such as Music and Dance where a class is offered more than once for credit for students who are continuing to develop their technical skills in a particular area. Allowing students to repeat these courses will give them an opportunity to continue to develop their specialty skills in each content area. Each time a student repeats the course, they gain more exposure and practice. Thus students will advance their skills, which happens in all creative fields such as writing, art, music, etc.

Discussions with affected departments:
N/A

Proposed by: Eli Marco Hall
Expected Implementation: Fall 2019
Course Modifications

ARTG 450

Intended semester to offer modified course for the 1st time: Fall 2019

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<tbody>
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<td>Course Title:</td>
<td>Identity Design</td>
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<td>Times for Credit:</td>
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<td>Requirement or listed choice for any program of study:</td>
<td>Yes</td>
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<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes</td>
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</table>

Art and Design  BFA,  Graphic Design-Visual Design:  3274

Justification:
Modifying ARTG 450 Identity Design to be taken more than one time for credit will allow majors to more easily fulfill the elective credits while allowing the Graphic Design Program to delete classes that were previously cross-listed to serve the same purpose. Previously, we had used topics courses for students who wanted to pursue further study in this area, but since we have offered the topics class more than twice this is a way to avoid having to create a whole new class, syllabus, SLOs, etc for a class that is essentially the same except for the students level of technical proficiency. There is precedence in other programs such as Music and Dance where a class is offered more than once for credit for students who are continuing to develop their technical skills in a particular area. Allowing students to repeat these courses will give them an oppportunity to continue to develop their specialty skills in each content area. Each time a student repeats the course, they gain more exposure and practice. Thus students will advance their skills, which happens in all creative fields such as writing, art, music, etc.

Discussions with affected departments:
N/A

Proposed by: Eli Marco Hall  Expected Implementation:  Fall 2019
Course Modifications

ARTG 493

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
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<tbody>
<tr>
<td>Course Prefix: ARTG</td>
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<td>Course No.: 493</td>
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<tr>
<td>Credit Hours: 3</td>
<td>3</td>
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<tr>
<td>Course Title: Portfolio Development</td>
<td>Portfolio Development</td>
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<tr>
<td>Times for Credit: 1</td>
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<td>Requirement or listed choice for any program of study: Yes</td>
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<td>Change affects program sheet or grad requirements: Yes</td>
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<tr>
<td></td>
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</table>

Art and Design BFA, Graphic Design-Visual Design: 3274

Justification:
Modifying ARTG 493 Portfolio Development to be taken more than one time for credit will allow majors to more easily fulfill the elective credits while allowing the Graphic Design Program to delete classes that were previously stacked to serve the same purpose. There is precedence in other programs such as Music and Dance where a class is offered more than once for credit for students who are continuing to develop their technical skills in a particular area.

Discussions with affected departments:
N/A

Proposed by: Eli Marco Hall
Expected Implementation: Fall 2019
Course Modifications

ARTS 152

Intended semester to offer modified course for the 1st time:

<table>
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<tbody>
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<tr>
<td>Course No.:</td>
<td>152</td>
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<tr>
<td>Credit Hours:</td>
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<td>Foundation Drawing II</td>
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<td>Foundation Drawing II</td>
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<tr>
<td>Times for Credit:</td>
<td>1</td>
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</tbody>
</table>

Description for catalog:

Current: Continuation of ARTS 151. Further development of drawing techniques, including objective and subjective drawing, using calligraphic line, gesture, and caged volume. Introduction to color in drawings. Introduction to contemporary drawing strategies.

Proposed: Continuation of ARTS 151. Further development of drawing techniques and an introduction to drawing the human figure. Issues of form, structure, volume, movement, composition, and expressive possibilities are explored and practiced.

Requirement or listed choice for any program of study: Yes ☑ No □

Change affects program sheet or grad requirements: Yes ☑ No □

Art and Design  BFA,  Art-K-12 Education: 3270
Art and Design  BFA,  Art-Studio Art: 3272

Course is a requirement for a new program:

BA, Art History

Justification:

We think that figure drawing is an important material for all art majors to learn, but with the retirement of our drawing professor we don't have the faculty to teach both ARTS 251- Life Drawing and ARTS 152. Foundation Drawing II, so we have decided to convert ARTS 152 Foundation Drawing II into a class that primarily focuses on figure drawing instead of still life drawing (this was the structure of these two drawing classes before the current drawing professor was hired). In order to do this we need to change the catalog description and adjust the topical course outline. We also wanted to change the title from 'Foundation Drawing II' to 'Foundation Drawing II: Figure Drawing' for clarity.

Topical course outline, current:
1. Learn to use both subjective and objective drawing
2. Develop organizational drawings
3. Exploration of caged volume, calligraphic line, gesture and expressive line
4. Learn to use color in drawings
5. Continue to use compositional strategies as a means of visual communication
6. Begin to develop projects that originate from gathered information

Topical course outline, proposed:
1. Learn to use both subjective and objective drawing
2. Develop organizational drawings
3. Exploration of caged volume, calligraphic line, gesture and expressive line
4. Learn how to use the figure in drawing
5. Continue to use compositional strategies as a means of visual communication
6. Begin to develop projects that originate from gathered information
7. Learn basic figure anatomy for the artist
Course Modifications

Student Learning Outcomes, current:
1. Demonstrate various drawing techniques and use them interchangeably
2. Develop drawing strategies that are appropriate to expressing their ideas
3. Demonstrate the use of subject, form, and content in their work
4. Demonstrate how to visually communicate an idea through composition
5. Demonstrate how to use drawing as a means of idea generation which can be transferred to various other two- and three-dimensional media
6. Demonstrate a strong knowledge of contemporary and historical artists and understand how they used drawing as a means to an end or to complement other media

Student Learning Outcomes, proposed:
1. Demonstrate various drawing techniques and their interchangeable use.
2. Evaluate drawing strategies for expressing specific ideas
3. Demonstrate the use of subject, form, and content in their work
4. Visually communicate an idea through composition
5. Utilize figure drawing to generate ideas transferable to other 2D and 3D media.
6. Identify contemporary and historical artists and evaluate their use of figure drawing as an end product or to complement other media.

Discussions with affected departments:

Discussed at faculty meeting on Nov. 9th, 2018.

Proposed by: Eric Elliott  Expected Implementation: Fall 2019
Course Modifications

ARTS 360

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
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<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
<td>360</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Course Title:</td>
<td>Sketchbook</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>Current: ARTE 101 and ARTS 152, or consent of instructor.</td>
</tr>
<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes</td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes</td>
</tr>
<tr>
<td>Art and Design BFA, Graphic Design-Visual Design:</td>
<td>3274</td>
</tr>
</tbody>
</table>

Justification:
The ARTS 360 Sketchbook course was initially proposed as an ARTS course prefix. It has been an option for many years for all students majoring in studio art.

Since the initial addition, ARTS 360 Sketchbook has become a requirement for Graphic Design majors and is now primarily for those students. This requires an enrollment of 20+ students to accommodate each year. (This is a large number of students for a art-based course, since a lot of instruction is one-on-one with the instructor and student.

In recent years, students majoring in the liberal arts across the nation have dropped and enrollment numbers in studio art has seen this decline recently.

By changing the prefix to ARTG, the department hopes the students majoring in studio art will pursue other options. In turn, by removing this course as an option for studio art, they will be pushed into other studio art courses. The department hopes this will help the enrollment numbers in other ARTS courses.

As a result this will relieve some of the overcrowding in the ARTS 360 Sketchbook course. Since under the Graphic Design prefix of ARTG, only graphic design majors will take it when offered. Example: In 2018, there were 27 students in the ARTS Sketchbook course, three of those were studio art majors. Without their enrollment, the course would have been a bit more manageable.

Also at this time we are deleting ARTS 460 Sketchbook II and modifying ARTG 360 Sketchbook I to be taken more than one time for credit will allow majors to more easily fulfill the elective credits while allowing the Graphic Design Program to delete classes that were previously cross-listed to serve the same purpose. There is precedence in other programs such as Music and Dance where a class is offered more than once for credit for students who are continuing to develop their technical skills in a particular area. Allowing students to repeat these courses will give them an opportunity to continue to develop their specialty skills in each content area. Each time a student repeats the course, they gain more exposure and practice. Thus students will advance their skills, which happens in all creative fields such as writing, art, music, etc.

Discussions with affected departments:

None

Proposed by: Suzie Garner

Expected Implementation: Fall 2019
Edits to ARTS 360 as requested by committee:

**New Course Description:**
The sketchbook as a primary medium for developing creativity and the artist’s thought processes. This course will include exploratory exercises and field assignments for developing skills in keeping an individual sketchbook as a place for recording ideas and the artist’s visual experience.
Course Modifications

ARTS 492

Intended semester to offer modified course for the 1st time: Fall 2019

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</thead>
<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
<td>492</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Course Title:</td>
<td>Painting Workshop IV</td>
</tr>
<tr>
<td>Contact hours:</td>
<td>Lecture 1</td>
</tr>
<tr>
<td></td>
<td>Lab</td>
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<td></td>
<td>Field</td>
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<td></td>
<td>Studio 4</td>
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<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>Engage Min.:</td>
<td>3750</td>
</tr>
<tr>
<td>Prep Min.:</td>
<td>3000</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
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</table>

Requirement or listed choice for any program of study: Yes [ ] No [ ] Yes [ ]
Change affects program sheet or grad requirements: Yes [ ] No [ ] No [ ]

Justification:

1. I have used the ARTS496 topics class too many times in order to cover the student need for an additional advanced painting class, so rather than create a whole new class with all the same outcomes in the same time slot, it makes more sense to just allow students to take ARTS492 Painting Workshop IV twice. After talking with the registrar, she cited precedence of classes in Music and Dance where students are allowed to take a class more than once for credit to continue practicing and developing their abilities in the same way as this would be used in Studio Art.

2. I have also changed the credit amount from 3 to 1-3, because all Art Department upper division classes are 3 credit classes and with the 40 credit hours of upper division classes requirement, I frequently have to create a one credit 496 topics class for students needing a 1 or 2 credit class, and since I have already offered these 496 classes twice, this will help to address that issue. ARTS 492 Painting Workshop IV is an advanced painting class where students are working on creating pieces for their final portfolio, students taking less than 3 credits will be required to have fewer pieces completed over the semester. Students will be allowed to take this course twice or up to 6 credit hours.

Discussions with affected departments:

N/A

Proposed by: Eric Elliott

Expected Implementation: Fall 2019
Course Modifications

ARTT 484

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
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<tr>
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<tbody>
<tr>
<td>Course Prefix: ARTT</td>
<td>ARTT</td>
</tr>
<tr>
<td>Course No.: 484</td>
<td>484</td>
</tr>
<tr>
<td>Credit Hours: 3</td>
<td>1-3</td>
</tr>
<tr>
<td>Course Title: Bronze Workshop II</td>
<td>Bronze Workshop II</td>
</tr>
<tr>
<td>Contact hours:</td>
<td></td>
</tr>
<tr>
<td>Lecture 1</td>
<td>Lecture .33-1</td>
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<tr>
<td>Lab</td>
<td>Lab</td>
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<tr>
<td>Field</td>
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<tr>
<td>Studio 4</td>
<td>Studio 1.33-4</td>
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<tr>
<td>Other</td>
<td>Other</td>
</tr>
<tr>
<td>Engage Min.: 3750</td>
<td>1250-6750</td>
</tr>
<tr>
<td>Prep Min.: 3000</td>
<td>1000-4500</td>
</tr>
<tr>
<td>Times for Credit: 1</td>
<td>2</td>
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<td>Requirement or listed choice for any program of study: Yes</td>
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</tr>
<tr>
<td>Change affects program sheet or grad requirements: Yes</td>
<td>☐ No ☑</td>
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</tbody>
</table>

Justification:

1. I have also changed the credit amount from 3 to 1-3, because all Art Department upper division classes are 3 credit classes and with the 40 credit hours of upper division classes requirement we frequently have to create a one credit 496 topics class for students needing a 1 or 2 credit class, and since I have already offered these 496 classes twice, this will help to address that issue. ARTT 484 Bronze Workshop II is an advanced class where students are working on creating pieces for their final portfolio, students taking less than 3 credits will be required to have fewer pieces completed over the semester.

2. Rather than create a whole new class with all the same outcomes stacked in the same time slot, it makes more sense to just allow students to take ARTT484 Bronze Workshop 2 twice. There is precedence of classes in Music and Dance where students are allowed to take a class more than once for credit to continue practicing and developing their abilities much in the same way as this would be used in Studio Art. Students will be allowed to take this course twice or up to 6 credit hours.

Discussions with affected departments:

NA

Proposed by: Eric Elliott

Expected Implementation: Fall 2019
## Course Modifications

### ARTS 274

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
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<tbody>
<tr>
<td><strong>Course Prefix:</strong></td>
<td>ARTS</td>
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<tr>
<td><strong>Course No.:</strong></td>
<td>274</td>
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<tr>
<td><strong>Credit Hours:</strong></td>
<td>3</td>
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<tr>
<td><strong>Course Title:</strong></td>
<td>Printmaking: Intaglio and Relief</td>
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<tr>
<td><strong>Times for Credit:</strong></td>
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<tr>
<td><strong>Prerequisites:</strong></td>
<td>Current: ARTE 101</td>
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<tr>
<td><strong>Requirement or listed choice for any program of study:</strong></td>
<td>Yes</td>
</tr>
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<td><strong>Change affects program sheet or grad requirements:</strong></td>
<td>Yes</td>
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</table>

Art and Design  BFA,  Art-K-12 Education:  3270  
Art and Design  BFA,  Art-Studio Art:  3272  
Art and Design  BA,  Studio Art: 3277  

### Justification:

While it is good for students, especially art majors, to have the foundational design knowledge and art related vocabulary learned in ARTE 101, 2D Design, it is not always absolutely necessary for non-majors. Many incoming non majors have had significant art courses in high school and just want to take college level studio courses. For example, last year I had a senior level business major who wanted to learn to screen print so that he could better understand how to create his own t-shirt and skate board designs. This has been true in the past for other students in this course (ARTS 274). Eliminating the prerequisite will allow for non-art majors to take the course if they are interested.

### Discussions with affected departments:

N/A  

Proposed by:  Josh Butler  
Expected Implementation:  Fall 2019
Course Modifications

ARTS 370

Intended semester to offer modified course for the 1st time: Spring 2020

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
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</thead>
<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
<td>370</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Course Title:</td>
<td>Printmaking: Lithography</td>
</tr>
<tr>
<td>Abbreviated Title:</td>
<td>Printmaking: Lithography</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>Current: ARTS 151</td>
</tr>
</tbody>
</table>

Description for catalog:

Current: Introduces concepts and techniques of fine art lithography, including traditional stone lithography, aluminum plate lithography, and positive plate photo lithography. Black and white, multiple color, hybrid or combination prints, and chine-colle.

Proposed: Introduces advanced concepts and techniques of fine art lithography, including traditional aluminum plate lithography, multiple color, hybrid or combination prints, and chine-colle techniques.

Development of creative skills, conceptual direction, craftsmanship and studio involvement.

Requirement or listed choice for any program of study: Yes ☐ No ☑
Change affects program sheet or grad requirements: Yes ☐ No ☑

Justification:

I am proposing a new course, ARTS 275: Printmaking Screen Printing and Lithography, that will include the basics techniques for lithography previously covered in ARTS 370 Lithography. This modification renames ARTS 370 from "Printmaking: Lithography" to "Printmaking: Intermediate Lithography", taking the beginning techniques out of the description, and clarifying the course's intention. Having ARTS 275 as the prerequisite is required because it teaches the beginning techniques for this course.

Topical course outline, current:

Topical Course Outline
Project 1: Basic stone lithography-dry media black and white
Project 2: Basic stone lithography-wet media, photo transfer, black and white
Project 3: Stone lithography-counter etching: evolution of intent
Project 4: Stone lithography-counter etching: T-Bar registration and reductive color print
Project 5: Aluminum plate lithography: Black and white-wet media, dry media and photo transfer
Project 6: Aluminum plate lithography: multiple plate, multiple color, pin-hole registration
Project 7: Photo plate lithography: Two plate, multiple color print
Final Project: Hybrid or combination technique multiple color print.

Topical course outline, proposed:

Topical Course Outline
Project 1: Stone lithography-counter etching: evolution of intent
Project 2: Stone lithography-counter etching: T-Bar registration and reductive color print
Project 3: Chine Colle
Project 4: Aluminum plate lithography: Black and white-wet media, dry media and photo transfer
Project 5: Aluminum plate lithography: multiple plate, multiple color, pin-hole registration
Final Project: Hybrid or combination technique multiple color print.

Student Learning Outcomes, current:
Course Modifications

Student Learning Outcomes
Upon completion of this course, a student should be able to:

1. Demonstrate understanding of fine art lithography techniques
   A. Basic stone lithography
      i. Basic wet media, dry media, chin-colle, and photo transfer in black and white
      ii. counter etching
      iii. T and Bar registration and reductive color printing
   B. Aluminum plate lithography
      i. Basic wet media, dry media and photo transfer in black and white
      ii. Pin-hole registration and multiple plate printing
   C. Positive Plate photo lithography
   D. Multiple color combination prints

2. Demonstrate safe use of lithography tools and equipment.
   A. Safe use of and care for various printing presses, rollers, and hand tools
   B. Safe and proper use of inks, chemicals, and solvents

3. Demonstrate understanding of studio art professionalism
   A. Attendance and involvement
   B. Timely completion of projects
   C. Participation in group critiques

Student Learning Outcomes, proposed:

Upon completion of this course, a student should be able to:

1. Demonstrate understanding of fine art lithography techniques
   A. Advanced stone lithography
      i. Counteretching and image evolution
   B. Additive and reductive color printing
      i. details of color inks and ink modifiers
   C. Aluminum plate lithography
      i. Basic wet media, dry media and photo transfer in black and white
      ii. Pin-hole registration and multiple plate color printing
   C. Chine Colle
   D. Multiple color combination prints

2. Demonstrate safe use of lithography tools and equipment.
   A. Safe use of and care for various printing presses, rollers, and hand tools
   B. Safe and proper use of inks, chemicals, and solvents

3. Demonstrate understanding of studio art professionalism
   A. Attendance and involvement
   B. Timely completion of projects
   C. Participation in group critiques

Discussions with affected departments:

N/A

Proposed by: Joshua Butler

Expected Implementation: Fall 2019

Edits to ARTS 370 as requested by committee:

New SLOs:
1. Utilize fine art lithography techniques to include advanced stone lithography, additive and reductive color printing, aluminum plate lithography, chine colle and multiple color combination prints.
2. Demonstrate the safe use of lithography tools and equipment.
3. Demonstrate studio art professionalism, such as attendance and involvement, timely completion of projects, and participation in group critiques.
Course Modifications

ARTS 371

Intended semester to offer modified course for the 1st time: Fall 2019

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<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
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<td>Course No.: 371</td>
<td>371</td>
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<tr>
<td>Credit Hours: 3</td>
<td>3</td>
</tr>
<tr>
<td>Course Title: Printmaking Workshop I</td>
<td></td>
</tr>
<tr>
<td>Times for Credit: 1</td>
<td>1</td>
</tr>
<tr>
<td>Prerequisites: Current: ARTS 270 or ARTS 274 or ARTS 370</td>
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</tr>
<tr>
<td>Proposed: ARTS 274 or ARTS 275</td>
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</tr>
<tr>
<td>Requirement or listed choice for any program of study: Yes</td>
<td>No</td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements: Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Justification:
Prerequisite adjustment to follow addition of new course ARTS 275 Printmaking: Screen Printing and Lithography (that will include the basic techniques for lithography previously covered in ARTS 370 Printmaking Intermediate Lithography), and the deletion of ARTS 270 Screen Printing I which is also a prerequisite.

Discussions with affected departments:
N/A

Proposed by: Joshua Butler
Expected Implementation: Fall 2019
Course Modifications

ARTS 375

Intended semester to offer modified course for the 1st time: Spring 2020

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<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
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</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Course Title:</td>
<td>Screen Printing II</td>
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<tr>
<td>Abbreviated Title:</td>
<td>Screen Printing II</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>Current: ARTS 270</td>
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<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes</td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes</td>
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</table>

Justification:
Title change to align with other advanced printmaking course titles.
Prerequisite change from ARTS 270 Screen Printing I, which will be deleted, to ARTS 275 Printmaking: Screen Print and Lithography which will be the new introductory course.

Discussions with affected departments:
N/A

Proposed by: Joshua Butler
Expected Implementation: Fall 2019
Program Modification

Art History (New Program)

Degree Type: BA

Revision to program sheet: Yes ☑ No ☐

Description of modification:
We changed the name of two courses, so we updated the program sheet to reflect this.

Justification:
In the 'Studio Art & Design Introduction' section the title for ARTS 152 Foundation Drawing II is being changed to Foundation Drawing II: Figure Drawing, and the title for the studio art photography class is being changed from ARTS 110 Digital Photography to ARTS 225 Introduction to Photography, so we need to adjust these names on this program sheet so they match the new courses on the books.

Revision to SLOs: Yes ☑ No ☐

Other changes: Yes ☑ No ☐

Discussions with affected departments:
N/A

Proposed by: Eric Elliott

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
2019-20 PROGRAM REQUIREMENTS
Degree: Bachelor of Art
Major: Art History

About This Major . . .
The BA degree in Art History provides students with an understanding of the importance of the visual arts to society and culture through the study of historic and contemporary artists, art movements and styles. Art History teaches students to critically analyze visual images in their original social and political context; the emphasis on visual literacy and critical thinking are especially valuable today. This degree can lead to professional employment in art museums and galleries, art publishing houses, and other areas of art services. The degree will also prepare students for advanced, graduate-level art history studies.

For more information on what you can do with this major, visit Career Services’ What to Do with a Major? resource.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, specialized knowledge/applied learning, personal and social responsibility, and information literacy. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Interpret and apply formal elements and principles of design (Critical Thinking)
2. Demonstrate application of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship (Applied Learning)
3. Generate individual response through concept and relevant sources of information to create personal content (Communication Fluency and Information Literacy)
4. Communicate clearly regarding the critical analysis of art and design both historical and contemporary (Specialized Knowledge/ Communication Fluency)
5. Reflect on and respond to ethical, social, civil, and/or environmental challenges as they relate to art, design, and new media (Personal and Social Responsibility)
6. Demonstrate an array of critical approaches to the study of historic art and visual culture in written or oral presentations (Specialized Knowledge)
7. Execute research projects involving visual analysis, reading research, critical thinking, writing and standard methods of documentation (Critical Thinking)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

2019-20 BA, Art History (####). Posted: 66
INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 3.00 cumulative GPA or higher in all foundation and art major courses.
- Minimum grade of “C” in all foundation and art major courses.
- No more than 6 semester hours of independent study courses can be used toward the degree.
- Additional fees are required throughout the art program for materials.
- KINA Activity courses can NOT be used to fulfill general elective credit requirements.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (18 semester hours, must maintain a cumulative 3.0 GPA, minimum grade of “C” is required in each course.)
- ARTE 101 - Two-Dimensional Design (3)
- ARTE 102 - Three-Dimensional Design (3)
- ARTE 118 - History of Art, Prehistory to Renaissance (3)
- ARTE 119 - History of Art, Renaissance to Present (3)

Two consecutive classes in the same foreign language. FLSL 111 & 112 will NOT fulfill this requirement. (6 semester hours)
- 
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2019-20 BA, Art History (####). Posted:
**BA: ART HISTORY REQUIREMENTS** (45 semester hours, must maintain a cumulative 3.0 GPA, minimum grade of “C” is required in each course.)

**Art Specialization** (9 semester hours)
- ARTE 294 - Sophomore Seminar (3)
- ARTH 220 - History of Modern Art (3)
- ARTS 151 - Foundation Drawing I (3)

**Art History Core** (12 semester hours)
Select 12 semester hours from the following:
- ARTH 315 - Nineteenth-Century Art (3)
- ARTH 316 - 20th Century Art to 1950 (3)
- ARTH 318 - Development of Contemporary Art (3)
- ARTH 321 - Gothic and Northern Renaissance Art and Architecture (3)
- ARTH 325 - Italian Renaissance Art History (3)
- ARTH 326 - Medieval Art: Early Christian to the Romanesque (3)

**Art History Capstone** (3 semester hours)
- ARTH 400 - Criticism and Research: Theory and Method (3)

**Art History Upper Division** (12 semester hours of ARTH 300 or 400-level)
- ________________________________
- ________________________________
- ________________________________
- ________________________________

**Studio Art & Design Introduction** (9 semester hours)
Choose one course from three of the following art and design disciplines:

**Animation, film, and motion design:**
- ARTA 123 - Lights! Camera! Action (3)
- ARTA 223 - Image and Motion (3)
- ARTA 224 - Principles of Film and Motion Design (3)
- ARTA 225 - Principles of Animation (3)

**Ceramics:**
- ARTS 241 - Beginning Hand Building (3)
- ARTS 242 - Beginning Wheel Throwing (3)

**Graphic Design:**
- ARTG 122 - Design It! (3)
- ARTG 215 - Graphic Design I (3)

**Drawing:**
- ARTS 152 - Foundation Drawing II: Figure Drawing (3)

**Painting:**
- ARTS 291 - Painting I: Intro to Painting (3)

**Photography:**
- ARTA 222 - Principles of Digital Photography (3)
- ARTS 110 - Digital Photography (3)
- ARTS 275 - Introduction to Photography (3)

**Printmaking:**
- ARTS 270 - Screen Printing I (3)
- ARTS 274 - Printmaking: Intaglio and Relief (3)

**Sculpture:**
- ARTT 270 - Sculpture I (3)
- ________________________________
- ________________________________
- ________________________________
GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 20 semester hours, **13 of which must be upper-level credits.** Excludes KINA Activity courses. ARTE 499 is a possible elective.)

☐ ________________________________________________________

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SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits
ENGL 111 - English Composition (3)
MATH 110 - College Mathematics (3) or higher
ARTE 101 - Two-Dimensional Design (3)
ARTE 118 - History of Art, Prehistory to Renaissance (3)
ARTS 151 - Foundation Drawing I (3)

Freshman Year, Spring Semester: 15 credits
ENGL 112 - English Composition (3)
Essential Learning - Humanities (3)
Essential Learning - Social and Behavioral Sciences (3)
ARTE 102 - Three-Dimensional Design (3)
ARTE 119 - History of Art, Renaissance to Present (3)

Sophomore Year, Fall Semester: 15 credits
Essential Learning - Natural Science (3)
Essential Learning - Fine Arts (3)
Foreign Language I (3)
ARTH 220 - History of Modern Art (3)
Studio Art Introduction (3)

Sophomore Year, Spring Semester: 15 credits
Essential Learning - Natural Science with Lab (4)
KINE 100 - Health and Wellness (1)
KINA Activity (1)
Foreign Language II (3)
ARTE 294 - Sophomore Seminar (3)
Art History Core Requirement (3)

Junior Year, Fall Semester: 16 credits
Essential Learning - Social and Behavioral Sciences (3)
ESSL 290 - Maverick Milestone (3)
ESSL 200 - Essential Speech (1)
Art History Core Requirement (2 courses) (6)
General Elective (3)

Junior Year, Spring Semester: 15 credits
Essential Learning - History (3)
Art History Core Requirement (3)
Upper Division Art History (3)
Studio Art Introduction (3)
General Elective (3)

Senior Year, Fall Semester: 14 credits
ARTH 400 - Criticism and Research (3)
Upper Division Art History (3)
Studio Art Introduction (3)
General Elective (2 courses) (5)

Senior Year, Spring Semester: 15 credits
Upper Division Art History (2 courses) (6)
General Electives (3 courses) (9)
Program Modification

Studio Art: 3277

Degree Type: BA

Revision to program sheet: Yes ☑ No □

Description of modification:
1. We are updating our departmental SLOs to bring them up to date with the new campus SLOs.
2. The printmaking professor would like to give the students the option to take one of two printmaking classes in the 'Art Specialization' category. Requirement of ARTS 274 (Printmaking: Intaglio and Relief) is changing to ARTS 274 or ARTS 275 (Printmaking: Screen Print and Lithography).

Justification:
1. We are adding a new #5 SLO that takes into account the Personal and Social Responsibility SLO and we are updating SLO #3 to add an Information Literacy element to bring both up to date with the new campus SLOs. The AVPAA of Assessment asked that we update SLOs #2 and #7 to make them more clear.
2. The printmaking professor created a new printmaking class, ARTS 275 Printmaking: Screen Print and Lithography, and he would like to give students the option to take that or ARTS 274 Intaglio/Relief, because there are different techniques in printmaking and allowing students to take the introduction class that best suits their individual direction will help their class sequencing.

Revision to SLOs: Yes ☑ No □

1: Program Student Learning Outcomes:

1) Interpret and apply formal elements and principles of design. (Critical Thinking)
2) Demonstrate application of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship. (Applied Learning)
3) Generate individual response through concept and relevant sources of information to create personal content. (Communication Fluency and Information Literacy)
4) Communicate clearly regarding the critical analysis of art and design both historical and contemporary. (Specialized Knowledge/ Communication Fluency)
5) Reflect on and respond to ethical, social, civil, and/or environmental challenges as they relate to art, design, and new media. (Personal and Social Responsibility)
6) Create and sustain a body of work through self-directed research, experimentation, risk-taking, and reflective analysis. (Applied Learning)
7) Justify critical analysis of artwork based on material, conceptual, and critical analysis. (Critical Thinking)

2: See about where Each SLO has a bracketed description of where each SLO meets up with the institutional SLOs.

3: Each of our courses will incorporate some or all aspects of each of the SLOs listed above. The Curriculum Map below specifies in which courses the planned assessments will be performed.

4: In each of the courses indicated in the Curriculum Map above, student work will be gathered and assessed using a rubric reflecting the Student Learning Outcomes identified.

Other changes: Yes □ No ☑

Discussions with affected departments:

Discussed by Art and Design faculty November 9th, 2018.

Proposed by: Eric Elliott

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Major . . .
A Bachelor of Art in Studio Art gives students strong technical skills and an art historical background while providing a general exposure to all of the disciplines in the studio art program. A BA in Art provides students numerous career paths requiring an art education. Students take a variety of 2D and 3D courses in drawing, painting, printmaking, ceramics, and sculpture. Students may customize their degree to meet their individual needs and would be well prepared to enter the art field and look for jobs that require a studio art education.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Interpret and apply formal elements and principles of design. (Critical Thinking)
2. Demonstrate proper use of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship. (Applied Learning)
3. Generate individual response through concept and relevant sources of information to create personal content. (Communication Fluency and Information Literacy)
4. Generate individual response through concept and theory beyond formal elements to create personal content. (Communication Fluency)
4.5. Communicate clearly regarding the critical analysis of art and design both historical and contemporary. (Specialized Knowledge/ Communication Fluency)
5. Reflect on and respond to ethical, social, civil, and/or environmental challenges as they relate to art, design, and new media. (Personal and Social Responsibility)
6. Create and sustain a body of work through self-directed research, experimentation, risk-taking, and reflective analysis. (Applied Learning)
6.7. Justify analysis of artwork based on concept and materials. Justify critical analysis of artwork based on material, conceptual, and critical analysis. (Critical Thinking)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:
- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.
If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS
- No more than 6 semester hours of independent study courses can be used toward the degree.
- Additional fees are required throughout the studio art program for materials.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

Humanities (3 semester hours)
- Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

History (3 semester hours)
- Select one History course (3)

Fine Arts (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (6 semester hours, must earn a grade of “C” or better in each course.)
Two consecutive classes in the same foreign language. FLAS 114 & 115 will NOT fulfill this requirement.
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BA, STUDIO ART REQUIREMENTS (48 semester hours)

Art Core (12 semester hours)
- ARTE 101 - Two-Dimensional Design (3)
- ARTE 102 - Three-Dimensional Design (3)
- ARTE 119 - History of Art, Renaissance to Present (3)
- ARTS 151 - Foundation Drawing I (3)

Art History (6 semester hours)
Select two 300- or 400-level Art History courses:
- ARTH ________________________________
- ARTH ________________________________

Art Studio (30 semester hours)
200-Level Requirements:
- ARTS 291 - Painting I: Intro to Painting (3)
- ARTT 270 - Sculpture I (3)
- One of the following courses:
  - ARTS 241 - Beginning Hand Building (3)
  - ARTS 242 - Beginning Wheel Throwing (3)
- Select one of the following courses:
  - ARTS 274 - Printmaking: Intaglio and Relief (3)
  - ARTS 275 – Printmaking: Screen Print and Lithography/Screenprinting (3)
- ARTS 274 - Printmaking: Intaglio and Relief (3)

300-Level Requirements: Any nine semester hours of ARTS or ARTT 300-Level courses
- ____________________________________________
- ____________________________________________

400-Level Requirements: Any nine semester hours of ARTS or ARTT 400-Level courses
- ____________________________________________
- ____________________________________________
- ____________________________________________

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 29 semester hours; 16 hours of upper division may be needed)
- ____________________________________________
- ____________________________________________
- ____________________________________________
- ____________________________________________
- ____________________________________________
- ____________________________________________
- ____________________________________________
- ____________________________________________
- ____________________________________________
- ____________________________________________
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits
- ENGL 111 - English Composition (3)
- MATH 110 - College Mathematics (3) or higher
- ARTE 101 - Two-Dimensional Design (3)
- ARTE 119 - History of Art, Renaissance to Present (3)
- ARTS 151 - Foundation Drawing I (3)

Freshman Year, Spring Semester: 15 credits
- ENGL 112 - English Composition (3)
- Essential Learning - Humanities (3)
- ARTS 291 - Painting I: Intro to Painting (3)
- ARTE 102 - Three-Dimensional Design (3)
- ARTS 241 - Beginning Hand Building (3) or ARTS 242 - Beginning Wheel Throwing (3)

Sophomore Year, Fall Semester: 15 credits
- Essential Learning - Social and Behavioral Sciences (3)
- Essential Learning - Natural Science (3)
- ARTS 274 - Printmaking: Intaglio and Relief (3) or ARTS 275 - Printmaking: Screen Print and Lithography (3)
- ARTT 270 - Sculpture I (3)
- Upper Division Art History Elective (3)

Sophomore Year, Spring Semester: 15 credits
- Essential Learning - Natural Science with Lab (4)
- KINE 100 - Health and Wellness (1)
- KINA Activity (1)
- Essential Learning - History (3)
- ARTS or ARTT 300-Level Studio (2 courses) (6)

Junior Year, Fall Semester: 16 credits
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- Foundation Course - Foreign Language (3)
- ARTS or ARTT 300-Level Studio (3)
- ARTS or ARTT 400-Level Studio (3)
- Essential Learning - Fine Arts (3)

Junior Year, Spring Semester: 15 credits
- Essential Learning - Social and Behavioral Sciences (3)
- Foundation Course - Foreign Language (3)
- ARTS or ARTT 400-Level Studio (2 courses) (6)
- Upper Division Art History Elective (3)

Senior Year, Fall Semester: 14 credits
- General Electives (5 courses) (14)

Senior Year, Spring Semester: 15 credits
- General Electives (5 courses) (15)
Program Modification

Graphic Design-Visual Design: 3274

Degree Type: BFA

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1. Change ARTS 360 Sketchbook to ARTG 360 Sketchbook
2. We are updating our departmental SLOs.

Justification:
1. Sketchbook is required for Graphic Design majors and changing the prefix to ARTG makes more sense in this context.
2. We are adding a new #5 SLO that takes into account the new Personal and Social Responsibility SLO and we are updating SLO #3 to add an Information Literacy element to bring them up to date with the new campus SLOs. The AVPAA of Assessment asked that we update SLOs #2 it make them more clear.

Revision to SLOs: Yes ☑ No ☐

1: Program Student Learning Outcomes:
1) Interpret and apply formal elements and principles of design. (Critical Thinking)
2) Demonstrate application of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship. (Applied Learning)
3) Generate individual response through concept and relevant sources of information to create personal content. (Communication Fluency and Information Literacy)
4) Communicate clearly regarding the critical analysis of art and design both historical and contemporary. (Specialized Knowledge/ Communication Fluency)
5) Reflect on and respond to ethical, social, civil, and/or environmental challenges as they relate to art, design, and new media. (Personal and Social Responsibility)
6. Design and publish a professional portfolio that meets current industry standards. (Applied Learning)
7. Demonstrate technical, aesthetic, and conceptual decisions based on the application of the design process. (Specialized Knowledge)

2: See about where Each SLO has a bracketed description of where each SLO meets up with the institutional SLOs.

3: Each of our courses will incorporate some or all aspects of each of the SLOs listed above. The Curriculum Map (see attachment) specifies in which courses the planned assessments will be performed.

4: In each of the courses indicated in the Curriculum Map above, student work will be gathered and assessed using a rubric reflecting the Student Learning Outcomes identified.

Other changes: Yes ☐ No ☑

Discussions with affected departments:

n/a

Proposed by: Eli Marco Hall

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Major . . .

The Graphic Design–Visual Design concentration focuses on current and professional industry standards within graphic design. Our degree is illustration-based and combines traditional hands-on media with the digital. The program, like the professional world is a fast-paced environment that mimics real-world design studios. Students will learn traditional layout design, composition, screenprinting, drawing, graphic design art history, CNC routing all as it applies to design. These areas are all combined with conceptual skills to make graduates in the area marketable. Entry in the program is contingent upon the successful completion of a portfolio review and exam during the sophomore year. A portfolio capstone course prepares students upon graduation for employment with a portfolio designed to gain employment. The program boasts two Graphic Design computer labs each furnished with Apple computers and the latest graphic design application software. Students can be a part of a community of student designers involved in a graphic design activities and field trips locally, nationally and abroad.

Entering students are encouraged to pay close attention to course sequencing and consult their advisor in order to complete the degree in four years. The successful Graphic Design degree candidate is prepared to enter professions within graphic design including advertising design, web design, package design, illustration, marketing and a myriad of related fields.

For more information on what you can do with this major, go to [http://www.coloradomesa.edu/career/whatmajor.html](http://www.coloradomesa.edu/career/whatmajor.html).

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Interpret and apply formal elements and principles of design. (Specialized Knowledge)
2. Demonstrate proper use of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship. Demonstrate application of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship. (Applied Learning)
3. Generate individual response through concept and relevant sources of information to create personal content. (Communication Fluency and Information Literacy)
4. Generate individual response through concept and theory beyond formal elements to create personal content. (Communication Fluency)
5. Communicate clearly regarding the critical analysis of art and design both historical and contemporary. (Critical Thinking/ Communication Fluency)
6. Reflect on and respond to ethical, social, civil, and/or environmental challenges as they relate to art, design, and new media. (Personal and Social Responsibility)
7. Design and publish a professional portfolio that meets current industry standards. (Applied Learning)
8. Demonstrate technical, aesthetic, and conceptual decisions based on the application of the design process. (Specialized Knowledge)

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.
Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- A grade of “B” or higher in all coursework toward the foundation area.
- To continue in the program and eventually graduate as graphic design majors a student must earn, within no more than three attempts, at least a grade of “B” in the major requirements.
- No more than 6 semester hours of independent study courses can be used toward the degree.
- KINA Activity courses can NOT be used to fulfill general elective credit requirements.
- In an effort to meet industry standards, Macintosh computers are used exclusively in all computer-based ARTG courses. Majors are strongly advised to consider purchasing a Macintosh and related print and web publication software for personal use.
- ARTG 300-level courses and ARTG 400-level courses may be taken upon acceptance into the Graphic Design Program.
- Admission in the program after the sophomore year will be contingent upon the student’s satisfying the following requirements:
  a. Completion of Graphic Design Admission Application Form.
  b. Completion of ARTE 101 Two-Dimensional Design, ARTE 102 Three-Dimensional Design, ARTG 215 Graphic Design I, ARTG 221 Graphic Design II, and ARTG 222 Illustration I with a grade of B or A.
  c. A grade of B or A in all coursework in the major.
  d. Successful completion of the Graphic Design entrance exam with a minimum score of 80%
  e. Portfolio Review comprised of Graphic Design work that meets the established Portfolio Review Criteria.
  f. Transfer students must pass the Portfolio Review and entrance exam to be formally accepted into the Graphic Design Program.
  g. Elective credits earned with an ARTG prefix must have a grade of C or higher.

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**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of "C" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (15 semester hours, must pass all courses with a grade of "B" or higher.)
- ARTE 101 - Two-Dimensional Design (3)
- ARTE 102 - Three-Dimensional Design (3)
- ARTE 118 - History of Art, Prehistory to Renaissance (3)
- ARTE 119 - History of Art, Renaissance to Present (3)
- ARTS 151 - Foundation Drawing I: FigureDrawing (3)
**BFA, GRAPHIC DESIGN, VISUAL DESIGN REQUIREMENTS** (51 semester hours, must pass all courses with a grade of “B” or higher within no more than three attempts.)

**Art History Course** (3 semester hours)
- ARTH 324 - History of Graphic Design (3)

**Graphic Design Courses** (48 semester hours)
- ARTG 122 - Design It! (3)
- ARTG 215 - Graphic Design I (3)
- ARTG 221 - Graphic Design II (3)
- ARTG 222 - Illustration I (3)
- ARTG 301 - Digital Illustration (3)
- ARTG 320 - Letterforms and Typography (3)
- ARTG 321 - Advanced Typography (3)
- ARTG 333 - Illustration II (3)
- ARTG 337 - Illustration III (3)
- ARTG 338 - Advertising Design I (3)
- ARTG 360 - Sketchbook (3)
- ARTG 401 - Digital Painting (3)
- ARTG 405 - Website Design (3)
- ARTG 406 - UX Design (3)
- ARTG 450 - Identity Design (3)
- ARTG 493 - Portfolio Development (3)

**GENERAL ELECTIVES** (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. Excludes KINA activity courses. 17 semester hours, additional hours of upper division may be needed.)
- _____________________________________________________________
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- _____________________________________________________________
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits
- ENGL 111 - English Composition (3)
- MATH 110 - College Mathematics (3) or higher
- ARTS 151 - Foundation Drawing I (3)
- ARTG 122 - Design It! (3)
- ARTE 101 - Two-Dimensional Design (3)

Freshman Year, Spring Semester: 15 credits
- ENGL 112 - English Composition (3)
- Essential Learning - Natural Science (3)
- Essential Learning - Social and Behavioral Sciences (3)
- ARTE 102 - Three-Dimensional Design (3)
- ARTG 215 - Graphic Design I (3)

Sophomore Year, Fall Semester: 16 credits
- Essential Learning - History (3)
- Essential Learning - Natural Science with Lab (4)
- ARTG 221 - Graphic Design II (3)
- ARTG 222 - Illustration I (3)
- ARTE 118 - History of Art, Prehistory to Renaissance (3)

Sophomore Year, Spring Semester: 16 credits
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- ARTG 301 - Digital Illustration (3)
- ARTG 320 - Letterforms and Typography (3)
- ARTG 333 - Illustration II (3)
- ARTE 119 - History of Art, Renaissance to Present (3)

Junior Year, Fall Semester: 16 credits
- ARTG 360 - Sketchbook (3)
- ARTG 321 - Advanced Typography (3)
- ARTH 324 - History of Graphic Design (3)
- ARTG 401 - Digital Painting (3)
- KINE 100 - Health and Wellness (1)
- Essential Learning - Fine Arts (3)

Junior Year, Spring Semester: 16 credits
- Essential Learning - Humanities (3)
- General Elective (3)
- KINA Activity (1)
- ARTG 337 - Illustration III (3)
- ARTG 338 - Advertising Design 4 (3)
- ARTG 405 - Website Design (3)

Senior Year, Fall Semester: 15 credits
- Essential Learning - Social and Behavioral Sciences (3)
- ARTG 406 - UX Design (3)
- ARTG 450 - Identity Design (3)
- General Electives (2 courses) (6)

Senior Year, Spring Semester: 15 credits
- ARTG 493 - Portfolio Development (3)
- General Electives (4 courses) (12)
Program Modification

Art-Studio Art: 3272

Degree Type:   BFA

Revision to program sheet: Yes ☑️   No ☐

Description of modification:

1. We are changing from having a photography option to making ARTS 225 Principles of Digital Photography in place of ARTS251 Life Drawing in our list of required 200 level classes.
2. We are updating our departmental SLOs.
3. Also, we are giving an extra printmaking option for students under the 200 level foundation classes. Requirement of ARTS 274 (Printmaking: Intaglio and Relief) is changing to ARTS 274 or ARTS 275 (Printmaking: Screen Print and Lithography).
4. We are moving the Life Drawing instruction from ARTS 251 to ARTS 152 Foundation Drawing II.

Justification:

1. The Art Department has had a growing demand for a photography program, and last year Forrest Zerbe our professor of photography was brought on as a point eight so we can now start to increase our photo offerings. We feel that students of all emphasis in the Studio Arts need to get experience with digital photography, and with photo programs such as Photoshop, and by requiring all students to take ARTS225 (instead of having the ARTS 110 photo class as an option) we will be able to fill that need. For all artists, in order to apply for anything you must submit a digital portfolio of images of your work, so it is vital that our students learn how to take good photographs and how to use digital photography software. Also, with the retirement of our drawing professor, we can not offer as many drawing classes as before, so replacing the figure drawing class with the photography class makes sense in that regard as well.
2. We are adding a new #5 SLO that takes into account the Personal and Social Responsibility SLO and we are updating SLO #3 to add an Information Literacy element to bring both up to date with the new campus SLOs. The AVPAA of Assessment asked that we update SLOs #2 and #7 to make them more clear.
3. The printmaking professor created a new printmaking class, ARTS 275 Printmaking: Screen Print and Lithography, and he would like to give students the option to take that or ARTS 274 Intaglio/Relief. There are different techniques in printmaking and allowing students to take the introduction class that best suits their individual direction will help their class sequencing.
4. With the retirement of our drawing professor, we can not offer as many drawing classes as before, so we are moving our figure drawing instruction from its own class, ARTS 251- Life Drawing, to the Foundation Drawing II class, and professors Butler and Elliott will take over the instruction of this course.

Revision to SLOs: Yes ☑️   No ☐

1: Program Student Learning Outcomes:

1) 1. Interpret and apply formal elements and principles of design. (Critical Thinking)
2. Demonstrate proper use of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship. (Applied Learning)
3. Generate individual response through concept and relevant sources of information to create personal content. (Communication Fluency and Information Literacy)
4. Communicate clearly regarding the critical analysis of art and design both historical and contemporary. (Specialized Knowledge/ Communication Fluency)
5. Reflect on and respond to ethical, social, civil, and/or environmental challenges as they relate to art, design, and new media. (Personal and Social Responsibility)
6. Create and sustain a body of work through self-directed research, experimentation, risk-taking, and reflective analysis. (Applied Learning)
7. Justify analysis of artwork based on concept and materials. (Critical Thinking)

2: See about where Each SLO has a bracketed description of where each SLO meets up with the institutional SLOs.
3: Each of our courses will incorporate some or all aspects of each of the SLOs listed above. The Curriculum
Program Modification

Map (see attachment) specifies in which courses the planned assessments will be performed.

4: In each of the courses indicated in the Curriculum Map above, student work will be gathered and assessed using a rubric reflecting the Student Learning Outcomes identified.

Other changes: Yes ☑ No ☐

The SLO changes will not change any of the program characteristics.

Program Strengths: By adding a required photography class to our class offerings, we are strengthening our program by giving our students skills in an area that all artists need and an overall more well-rounded education in the arts.

Number of Faculty: Our faculty numbers are not changing, but we are shifting from having a dedicated Studio Art drawing professor (Assistant Professor Alison Harris is retiring) to having a photography instructor (Instructor Forrest Zerbe) who is shared between the AFPMD and the Studio Art Concentrations. Assistant Professor Eric Elliott and Professor Josh Butler will take over the drawing classes for Assistant Professor Alison Harris.

Discussions with affected departments:

Discussed by Art and Design faculty November 9th, 2018.

Proposed by: Eric Elliott

Expected Implementation: Fall 2019
About This Major

The BFA degree in Art with a concentration in Studio Art is designed to prepare students with strong technical skills in a variety of art media. This skill combined with an art historical background will allow them to develop an individual focus in their art. Students can take a variety of two-dimensional courses in drawing, painting, printmaking, or photography. In the three-dimensional area, they can study ceramics, metal casting and sculpture. Extensive studies in Art History engage the students in historic and contemporary artists, art movements, and artistic styles and allows students to understand and place their art within a historical context. A BFA with a concentration in Studio Art prepares the student for graduate school and a career as a professional artist.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Interpret and apply formal elements and principles of design. (Critical Thinking)
2. Demonstrate application of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship. (Applied Learning)
3. Generate individual response through concept and relevant sources of information to create personal content. (Communication Fluency)
4. Generate individual response through concept and theory beyond formal elements to create personal content. (Communication Fluency)
5. Communicate clearly regarding the critical analysis of art and design both historical and contemporary. (Specialized Knowledge/Communication Fluency)
6. Reflect on and respond to ethical, social, civil, and/or environmental challenges as they relate to art, design, and new media. (Personal and Social Responsibility)
7. Create and sustain a body of work through self-directed research, experimentation, risk-taking, and reflective analysis. (Applied Learning)
8. Justify analysis of artwork based on concept and materials. Justify critical analysis of artwork based on material, conceptual, and critical analysis. (Critical Thinking)

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

2019-20 BFA, Art, Studio Art (3272). Posted:
Submission deadlines and commencement details can be found at [http://www.coloradomesa.edu/registrar/graduation.html](http://www.coloradomesa.edu/registrar/graduation.html).

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

**INSTITUTIONAL DEGREE REQUIREMENTS**

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

**PROGRAM-SPECIFIC DEGREE REQUIREMENTS**

- 3.00 cumulative GPA or higher in all 200-, 300-, and 400-level Studio Art major courses.
- Minimum grade of “C” in all 200-, 300-, and 400-level Studio Art major courses.
- No more than 6 semester hours of independent study courses can be used toward the degree.
- Special requirements for admission into the Studio Art program: Every student who is a sophomore in academic standing, or a transfer student with 60 credits or more (including students transferring into a Studio Art emphasis from K-12 Teaching, Graphic Design, or Art History) must satisfy the following requirements:
  1. Completion of ARTE 294 Sophomore Seminar with grade of "B" or better.
  2. Completion of Art Foundation Courses ARTE 101, 102, 118, 119 and ARTS 151, 152, with a grade of "B" or better.
  3. Maintain a cumulative GPA of 3.00 or higher in all 200-, 300-, and 400-level Studio Art major courses.
  4. Successful completion of Art entrance exam with a minimum of 80%.
  5. Completion of all 200-, 300-, and 400-level Studio Art major courses with a grade of "C" or better.
- Additional fees are required throughout the studio art program for materials.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (18 semester hours, must pass all courses with a grade of "B" or better.)
- ARTE 101 - Two-Dimensional Design (3)
- ARTE 102 - Three-Dimensional Design (3)
- ARTE 118 - History of Art, Prehistory to Renaissance (3)
- ARTE 119 - History of Art, Renaissance to Present (3)
- ARTS 151 - Foundation Drawing I (3)
- ARTS 152 - Foundation Drawing II  [Figure Drawing] (3)
**BFA: ART, STUDIO ART REQUIREMENTS** (57 semester hours, must pass all courses with a grade of "C" or higher, unless otherwise noted.)

**Art History 200-Level** (3 semester hours)
- ARTH 220 - History of Modern Art (3)

**Art History Upper Division** (6 semester hours of ARTH, 300- or 400-Level)
- Select one of the following courses:
  - ARTH 310 - History of Modern Art (3)
  - ARTH 320 - History of Medieval Art (3)
  - ARTH 330 - History of Modern Art (3)

**Art Studio 200-Level** (15 semester hours)
- ARTS 251 - Life Drawing (3)
- ARTS 225 - Introduction to Principles of Digital Photography (3)
- ARTS 225 - Digital Photography (3)
- Select one of the following courses:
  - ARTS 241 - Beginning Hand Building (3)
  - ARTS 242 - Beginning Wheel Throwing (3)
- ARTS 291 - Painting I: Intro to Painting (3)
- ARTT 270 - Sculpture I (3)

**Professional Practice** (6 semester hours)
- ARTE 294 - Sophomore Seminar (3); must earn a grade of "B" or higher
- ARTE 494 - Senior Seminar and Portfolio (3)

**Art Studio 300-Level** (15 semester hours of ARTS or ARTT 300-Level courses)
- Select one of the following courses:
  - ARTS 301 - Design (3)
  - ARTS 302 - Printmaking: Intaglio and Relief (3)
  - ARTS 325 - Printmaking: Screen Print and Lithography (3)
  - ARTS 375 - Lithography/Screenprinting (3)
  - ARTS 374 - Printmaking: Intaglio and Relief (3)
  - ARTS 375 - Printmaking: Screen Print and Lithography (3)

**Art Studio 400-Level** (12 semester hours of ARTS or ARTT 400-Level courses)
- Select one of the following courses:
  - ARTS 421 - Advanced Hand Building (3)
  - ARTS 422 - Advanced Wheel Throwing (3)
  - ARTS 491 - Advanced Painting I: Intro to Painting (3)
  - ARTT 470 - Advanced Sculpture I (3)

**GENERAL ELECTIVES** (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours, including 40 upper division hours. 8 semester hours, at least 4 of which must be upper division.)
- Select one of the following courses:
  - ARTS 301 - Design (3)
  - ARTS 302 - Printmaking: Intaglio and Relief (3)
  - ARTS 325 - Printmaking: Screen Print and Lithography (3)
  - ARTS 375 - Lithography/Screenprinting (3)
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits
- ENGL 111 - English Composition (3)
- MATH 110 - College Mathematics (3) or higher
- ARTE 118 - History of Art, Prehistory to Renaissance (3)
- ARTE 101 - Two-Dimensional Design (3)
- ARTS 151 - Foundation Drawing I (3)

Freshman Year, Spring Semester: 16 credits
- ENGL 112 - English Composition (3)
- KINA Activity (1)
- ARTE 102 - Three-Dimensional Design (3)
- ARTE 119 - History of Art, Renaissance to Present (3)
- ARTS 152 - Foundation Drawing II, Figure Drawing (3)
- ARTS or ARTT 200-Level Studio (3)

Sophomore Year, Fall Semester: 16 credits
- Essential Learning - Social and Behavioral Sciences (3)
- Essential Learning - Natural Science (3)
- KINE 100 - Health and Wellness (1)
- ARTS or ARTT 200-Level Studio (2 courses) (6)
- ARTH 220 - History of Modern Art (3)

Sophomore Year, Spring Semester: 16 credits
- Essential Learning - Natural Science with Lab (4)
- Essential Learning - Humanities (3)
- ARTS or ARTT 200-Level Studio (2 courses) (6)
- ARTE 294 - Sophomore Seminar (3)

Junior Year, Fall Semester: 13 credits
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- Essential Learning - Fine Arts (3)
- ARTS or ARTT 300-Level Studio (2 courses) (6)

Junior Year, Spring Semester: 15 credits
- Essential Learning - Social and Behavioral Sciences (3)
- Essential Learning - History (3)
- ARTH Upper Division Art History (3)
- ARTS or ARTT 300-Level Studio (2 courses) (6)

Senior Year, Fall Semester: 14 credits
- Electives (5)
- ARTH Upper Division Art History (3)
- ARTS or ARTT 400-Level Studio (2 courses) (6)

Senior Year, Spring Semester: 12 credits
- ARTE 494 - Studio Art Senior Seminar (3)
- General Elective (3)
- ARTS or ARTT 400-Level Studio (2 courses) (6)
Program Modification

Art-K-12 Education: 3270

Degree Type: BFA

Revision to program sheet: Yes ☒ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Add program requirement about passing Praxis II prior to student teaching (internship) semester and remove bullet point on disposition assessment.
3. All other changes approved by UCC. The above are additional changes.

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education’s Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching. The disposition assessment is not used specifically or only in these courses so this point is not technically accurate.

Revision to SLOs: Yes ☒ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☒ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:
The Art and Design Department and The Center for Teacher Education have both approved these changes as of January 29, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
Program Modification

Art-K-12 Education: 3270

Degree Type: BFA

Revision to program sheet: Yes ☑ No ☐

Description of modification:

1. We are changing ARTS 110 Digital Photography to ARTS 225 Principles of Digital Photography.
2. We are updating our departmental SLOs.
3. We are giving an extra printmaking option for students under the 200 level foundation classes.

Requirement of ARTS 274 (Printmaking: Intaglio and Relief) is changing to ARTS 274 or ARTS 275 (Printmaking: Screen Print and Lithography).

Justification:

1. The Art Department has had a growing demand for a photography program, and last year Forrest Zerbe our professor of photography was brought on as a point eight so we can now start to increase our photo offerings. We feel that students of all emphasis in the Studio Arts need to get experience with digital photography, and with photo programs such as Photoshop, and by requiring all students to take ARTS 225 (instead of having the ARTS 110 photo class as an option) we will be able to fill that need. For all artists, in order to apply for anything you must submit a digital portfolio of images of your work, so it is vital that our students learn how to take good photographs and how to use digital photography software. We are deleting ARTS 110 Digital Photography because it was determined that it was too difficult for a 100 level class, but since all of the material being covered is important to the introductory level, we decided to turn it into a 200 level class (ARTS 225 Principles of Digital Photography).
2. We are adding a new #5 SLO that takes into account the new Personal and Social Responsibility SLO and we are updating SLO #3 to add an Information Literacy element to bring them up to date with the new campus SLOs. The AVPAA of Assessment asked that we update SLOs #2 and #7 to make them more clear. And I noticed that SLO #6 was the the SLO for Studio Art not Art Education, so I am making that correction.
3. The printmaking professor created a new printmaking class, ARTS 275 Printmaking: Screen Print and Lithography, and he would like to give students the option to take that or ARTS 274 Intaglio/Relief, because there are different techniques in printmaking and allowing students to take the introduction class that best suits their individual direction will help their class sequencing.

Revision to SLOs: Yes ☑ No ☐

1: Program Student Learning Outcomes (these 7 listed below are the art department’s SLO’s, and 8-12 are the Education Department’s SLO’s for the Art Education Degree):

1) Interpret and apply formal elements and principles of design. (Critical Thinking)
2) Demonstrate application of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship. (Applied Learning)
3) Generate individual response through concept and relevant sources of information to create personal content. (Communication Fluency and Information Literacy)
4) Communicate clearly regarding the critical analysis of art and design both historical and contemporary. (Specialized Knowledge/ Communication Fluency)
5) Demonstrate the various approaches to teaching in a K-12 environment. (Personal and Social Responsibility)
6) Create and sustain a body of work through self-directed research, experimentation, risk-taking, and reflective analysis. (Applied Learning)
7) Justify critical analysis of artwork based on material, conceptual, and critical analysis. (Critical Thinking)

2: See about where Each SLO has a bracketed description of where each SLO meets up with the institutional SLOs.

3: See Curriculum Map attached for specifics of where the planned assessments will be performed in each course taught in the Art Department.
Program Modification

4: In each of the courses indicated in the Curriculum Map, student work will be gathered and assessed using a rubric reflecting the Student Learning Outcomes identified.

Other changes: Yes ☑️ No ☐

The SLO changes will not change any of the program characteristics.

Program Strengths: By adding a required photography class to our class offerings, we are strengthening our program by giving our students skills in an area that all artists need and an overall more well-rounded education in the arts.

Number of Faculty: Our faculty numbers are not changing, but we are shifting from having a dedicated Studio Art drawing professor (Assistant Professor Alison Harris is retiring) to having a photography instructor (Instructor Forrest Zerbe) who is shared between the AFPMD and the Studio Art Concentrations. Assistant Professor Eric Elliott and Professor Josh Butler will take over the drawing classes for Assistant Professor Alison Harris.

Discussions with affected departments:
Discussed by Art and Design faculty November 9th, 2018. Emailed Education on December 14th and they were fine with the Art Department making changes to the 'Art' side of the Arts Education degree.

Proposed by: Eric Elliott

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
About This Major...

The Bachelor of Fine Arts degree leads to licensure for Colorado K-12 Art Education. The visual art emphasis includes coursework in theory, art history, and studio art. Art teaching methods courses in Elementary and Secondary Art are an integral part of the degree plan. As a student, you will gradually accumulate over 200 hours of classroom experience before beginning student teaching. School districts throughout western Colorado provide opportunities to gain experience with children of all ages and backgrounds in a variety of school settings.

A minimum of 75 credit hours of Essential Learning and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education K-12 licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria. EDUC 115 and EDUC 215 must be taken before applying to the program.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

Art Outcomes:
1. Interpret and apply formal elements and principles of design. (Critical Thinking)
2. Demonstrate application proper use of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship. (Applied Learning)
3. Generate individual response through concept and relevant sources of information to create personal content. (Communication Fluency and Information Literacy)
4. Communicate clearly regarding the critical analysis of art and design both historical and contemporary. (Specialized Knowledge/ Communication Fluency)
5. Reflect on and respond to ethical, social, civil, and/or environmental challenges as they relate to art, design, and new media. (Personal and Social Responsibility)
6. Create and sustain a body of work through self-directed research, experimentation, risk-taking, and reflective analysis. Demonstrate the various approaches to teaching in a K-12 environment. (Applied Learning)
7. Justify analysis of artwork based on concept and materials. Justify critical analysis of artwork based on material, conceptual, and critical analysis. (Critical Thinking)

Teacher Education Outcomes:
1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)
7. Instruct K-12 students based on self-written learning plans to address individual learning and developmental patterns. (Specialized Knowledge)

8. Design a safe and supportive learning environment for elementary and secondary education students. (Applied Learning)

9. Apply content knowledge while working with learners to access information in real-world settings ensuring learner mastery of the content. (Specialized Knowledge)

10. Integrate assessment, planning, and instructional strategies in coordinated and engaging ways through multiple means of communication. (Critical Thinking/Communication Fluency)


Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at [http://www.coloradomesa.edu/registrar/graduation.html](http://www.coloradomesa.edu/registrar/graduation.html). If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.8 cumulative GPA or higher in all CMU coursework.
• A "B" or higher in coursework toward the foundation and major content areas.
• K-12 Art licensure candidates are expected to show proficiencies in State of Colorado Performance-Based and Art Model Content Standards. Formal evaluation of that knowledge is shown through a professional proficiency portfolio, developed throughout licensure coursework and reviewed by both Art Education and Teacher Education faculty at the end of the student teaching internship.
• Candidates are expected to earn a minimum grade of "B" in all licensure classes (EDUC prefix courses), which must be taken in sequence prescribed by the Center for Teacher Education. The licensure sequence is begun during the junior year (usually fall semester), and requires four semesters for completion.
• Professional dispositions for teaching are measured throughout the licensure sequence and include qualities such as ethical and responsible behaviors, personal presentation, ability to work in collegial capacities, ability to manage time, paperwork and resources, and aptitude for elevating the academic standing of the Art Education field.
• Completion of admission to the K-12 Art Licensure program includes:
  • All requirements and prerequisite courses are met for the Center for Teacher Education’s application for admission (usually completed during the sophomore year).
  • A meeting with Art Education faculty to discuss professional goals and establish a timeline for completion of requirements.
  • Must pass all studio and art history courses with a grade of "B" or higher.
  • Completion of ARTE 101, 102, 118, 119, ARTS 120, 151, 152, 225, 241, and 274 or 275 within the first 60 hours.
  • A professional disposition form completed in ARTD 410 and ARTD 412.
• Additional fees are required through the licensure program and range from $200-$300, covering basic proficiency tests, fingerprinting, and content exam, in addition to the cost of textbooks and art materials.
• Students are required to participate in exit examinations or other programs deemed necessary to comply with the college accountability requirement.
• Students must pass the PRAXIS II exam in the content area prior to beginning the student teaching internship.

ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of "B" or better and must be completed by the time the student has 60 semester hours.)
  • ENGL 111 - English Composition (3)
  • ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
  • MATH 110 - College Mathematics (3) or higher

Humanities (3 semester hours)
  • Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
  • PSYC 233 - Human Growth and Development (3) (must receive a grade of "B" or better)
  • Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
  • Select one Natural Sciences course (3)
  • Select one Natural Sciences course with a lab (4)

History (3 semester hours)
  • Select one History course (3)

Fine Arts (3 semester hours)
  • FINE 101 - The Living Arts (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (18 semester hours, must pass all courses with a grade of "B" or higher. All foundation courses, along with ARTS 241, ARTS 242, and ARTS 274 or 275 must be completed within the first 60 hours.)
- ARTE 101 - Two-Dimensional Design (3)
- ARTE 102 - Three-Dimensional Design (3)
- ARTE 118 - History of Art, Prehistory to Renaissance (3)
- ARTE 119 - History of Art, Renaissance to Present (3)
- ARTS 151 - Foundation Drawing I (3)
- ARTS 152 - Foundation Drawing II, Figure Drawing (3)
BFA: ART, K-12 EDUCATION REQUIREMENTS (30 semester hours, must pass all courses with a grade of "B" or higher.)

Art Specialization (24 semester hours)
- ARTS 2252110 – Principles of Digital Photography (3)
- ARTS 241 - Beginning Hand Building (3)
- ARTS 242 - Beginning Wheel Throwing (3)
- ARTT 270 - Sculpture I (3)
- Select one of the following courses:
  - ARTS 274 - Printmaking: Intaglio and Relief (3)
  - ARTS 275 – Printmaking: Screen Print and Lithography/Screenprinting (3)
- ARTS 291 - Painting I: Intro to Painting (3)
- ARTH 315 - Nineteenth-Century Art (3)
- ARTH 316 - Twentieth-Century Art to 1950 (3)

Art Certification Specialty (6 semester hours of 300-Level ARTS or ARTT courses)
- _____________________________
- _____________________________
- _____________________________

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 3 semester hours)
- _____________________________
- _____________________________
- _____________________________

K-12 LICENSURE REQUIREMENTS (32 semester hours)
Program Requirements: ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215 (all with a grade of "B" or better) and formal acceptance to the Teacher Education Program
- EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
- EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3) (20 field experience hours)
- EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
- ARTD 410 - Elementary Art Education Methods (3)
- ARTD 410L - Field/Studio Experience in Elementary Art Education Methods (1) (40 field experience hours)
- ARTD 412 - Secondary Art Education Methods (4) (40 field experience hours)
- EDUC 442 - Integrating Literacy across the Curriculum: Secondary and K-12 Art (3) (60 field experience hours)
- EDUC 475 - Classroom Management for K-12 Educators (1)
- EDUC 499D - Teaching Internship and Colloquia: Elementary for K-12 (6) (300 field experience hours)
- EDUC 499H - Teaching Internship and Colloquia: Secondary for K-12 (6) (300 field experience hours)
- Praxis II Exam Passed

All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must pass the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.

2019-20 BFA, Art, K12 Education (3270). Posted:
# SUGGESTED COURSE SEQUENCING

## Freshman Year, Fall Semester: 16 credits
- ENGL 111 - English Composition (3)
- MATH 110 - College Mathematics (3) or higher
- ARTE 118 - History of Art, Prehistory to Renaissance (3)
- KINE 100 - Health and Wellness (1)
- ARTE 101 - Two-Dimensional Design (3)
- ARTS 151 - Foundation Drawing I (3)

## Freshman Year, Spring Semester: 17 credits
- ENGL 112 - English Composition (3)
- KINA Activity (1)
- Essential Learning - Social and Behavioral Sciences (3)
- Essential Learning - Natural Science (3)
- ARTE 102 - Three-Dimensional Design (3)
- ARTE 119 - History of Art, Renaissance to Present (3)
- EDUC 115 - What It Means to be an Educator (1)

## Sophomore Year, Fall Semester: 16 credits
- PSYC 233 - Human Growth and Development (3)
- ARTS 242 - Beginning Wheel Throwing (3)
- Essential Learning - Fine Arts (3)
- ARTS 152 - Foundation Drawing II: Figure Drawing (3)
- Essential Learning - Natural Science with Lab (4)

## Sophomore Year, Spring Semester: 14 credits
- ARTS 241 - Beginning Hand Building (3)
- ARTS 274 - Printmaking: Intaglio and Relief (3) or ARTS 275 – Printmaking: Screen Print and Lithography (3)
- ARTS 222 - Introduction to Principles of Digital Photography (3)
- ARTS 221 - Digital Photography (3)
- EDUC 215 - Teaching as a Profession (1)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

## Junior Year, Fall Semester: 15 credits
- ARTT 270 - Sculpture I (3)
- ARTH 315 - Nineteenth Century Art (3)
- ARTS 291 - Painting I: Intro to Painting (3)
- EDUC 342 - Pedagogy and Assessment: Secondary/K-12 (3)
- EDUC 343 - Teaching to Diversity (3)

## Junior Year, Spring Semester: 16 credits
- ARTH 316 - Twentieth-Century Art to 1950 (3)
- ARTS Upper Division Certification Specialty (3)
- Essential Learning - Humanities (3)
- Essential Learning - History (3)
- ARTD 410 - Elementary Art Education Methods (3)
- ARTD 410L - Field/Studio Experience: Elementary Art Education Methods (1)

## Senior Year, Fall Semester: 14 credits
- ARTD 412 - Secondary Art Education Methods (4)
- EDUC 442 - Integrating Literacy Across the Curriculum (3)
- EDUC 475 - Classroom Management (1)
- ARTS Upper Division Certification Specialty (3)
- General Elective (3)

## Senior Year, Spring Semester: 12 credits
- 2019-20 BFA, Art, K12 Education (3270). Posted:
- EDUC 499D - Teaching Internship - Elementary (6)
- EDUC 499H - Teaching Internship - Secondary (6)
Department: Biology

Course Additions

BIOL 338
Credit Hours 3

Course Title: Small Mammal Biology
Abbreviated Title: Small Mammal Biology

Contact hours per week: Lecture 3  Lab  Field  Studio  Other
Type of Instructional Activity: Lecture

Academic engagement minutes: 2250  Student preparation minutes: 4500

Intended semesters for offering this course: Fall ☑  J-Term ☐  Spring ☐  Summer ☑
Intended semester to offer course 1st time: Summer 2019
Number of times course may be taken for credit: 1
Essential Learning Course: Yes ☑  No ☐

Prerequisites: Yes ☑  No ☐

Junior or Senior Standing
Prerequisite for other course(s): Yes ☑  No ☐
Co-requisites: Yes ☑  No ☐

Requirement or listed choice for any program of study: Yes ☑  No ☐

Biology BS, Biological Sciences-Biology: 3410
Biology BS, Biological Sciences-Cellular, Molecular, and Developmental Biology: 3414
Biology BS, Biological Sciences-Ecology, Evolution and Organismal Biology: 3409

Overlapping content with present courses offered on campus: Yes ☑  No ☐

Additional faculty FTE required: Yes ☑  No ☐
Additional equipment required: Yes ☑  No ☐
Additional lab facilities required: Yes ☑  No ☐

Course description for catalog:
Introduction to the life history and taxonomic classification of small mammals. Focus includes the unique constraints and physiological challenges imposed by small body size (less than 5kg).

Justification:
While the Biology course offerings include a variety of organism-specific courses, such as ornithology, fish biology, herpetology and mammology, none specifically cover this unique, diverse and ecologically important group of animals. The addition of BIOL 338 Small Mammal Biology will give students with an interest in wildlife another option in their restricted electives under "Additional Biology Courses".

Topical course outline:
Unit 1-Introduction/Classification of Small Mammals
Unit 2- Insectivores
Unit 3-Herbivores
Unit 4-Carnivores/Omnivores
Unit 5-Endothermy/Heterothermy
Unit 6-Coping with Cold/ Coping with Heat/Aridity
Unit 7- Reproduction/Population Cycles

Student Learning Outcomes:
Course Additions

1. Describe biological diversity for small mammals
2. Explain the unique biological constraints on the physiology of small mammals
3. Identify unique qualities and life history of small mammals

Discussions with affected departments:
NA

Proposed by: Stephanie Matlock
Expected Implementation: Fall 2019
Course Modifications

BIOL 405

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
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<tbody>
<tr>
<td>Course Prefix:</td>
<td>BIOL</td>
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<tr>
<td>Course No.:</td>
<td>405</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Course Title:</td>
<td>Advanced Ecological Methods</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
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<td>Prerequisites:</td>
<td></td>
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Biology BS, Biological Sciences-Biology: 3410
Biology BS, Biological Sciences-Cellular, Molecular, and Developmental Biology: 3414
Biology BS, Biological Sciences-Ecology, Evolution and Organismal Biology: 3409

Justification:

We are replacing STAT 311 Statistical Methods with STAT 301 Computational Statistics as a suggested prerequisite. Material from STAT 311 will be covered in STAT 301 with the addition of using computational software. The statistics faculty believe that STAT 301 is a more valuable course for students. Note STAT 311 in an elective group of many courses.

Topical course outline, current:
NA

Topical course outline, proposed:
NA

Student Learning Outcomes, current:
NA

Student Learning Outcomes, proposed:
NA

Essential Learning SLOs, proposed:
NA

Discussions with affected departments:
This change was initiated by the statistics faculty in response to the course addition of STAT 301 approved at the October 25, 2018 UCC meeting.

Proposed by: Lisa Driskell

Expected Implementation: Fall 2019
Course Modifications

BIOL 405L

Intended semester to offer modified course for the 1st time: Fall 2019

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Requirement or listed choice for any program of study: Yes ☑ No ☐
Change affects program sheet or grad requirements: Yes ☑ No ☐

Biology BS, Biological Sciences-Biology: 3410
Biology BS, Biological Sciences-Cellular, Molecular, and Developmental Biology: 3414
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Justification:

We are replacing STAT 311 Statistical Methods with STAT 301 Computational Statistics as a suggested prerequisite. Material from STAT 311 will be covered in STAT 301 with the addition of using computational software. The statistics faculty believe that STAT 301 is a more valuable course for students. Note STAT 311 in an elective group of many courses.

Topical course outline, current:
NA

Topical course outline, proposed:
NA

Student Learning Outcomes, current:
NA

Student Learning Outcomes, proposed:
NA

Essential Learning SLOs, proposed:
NA

Discussions with affected departments:
This change was initiated by the statistics faculty in response to the course addition of STAT 301 approved at the October 25, 2018 UCC meeting.

Proposed by: Lisa Driskell
Expected Implementation: Fall 2019
**Program Modification**

**Biological Sciences-Biology: 3410**

**Degree Type:** BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:
Include new course, BIOL 338 Small Mammal Biology, as a listed option for restricted electives.

Justification:
While the Biology course offerings include a variety of organism-specific courses, such as ornithology, fish biology, herpetology and mammology, none specifically cover this unique, diverse and ecologically important group of animals. The addition of BIOL 338 Small Mammal Biology will give students with an interest in wildlife another option in their restricted electives under "Additional Biology Courses".

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☐ No ☑

Discussions with affected departments: NA

Proposed by: Stephanie Matlock

Director of Teacher Education Signature: 

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Science
Major: Biological Sciences
Concentration: Biology

About This Major . . .
The Bachelor of Science degree with a Biological Science major provides a broad background in the biological sciences. Students choose biology courses from four areas: cell, developmental, and molecular biology; anatomical and physiological biology; organismal biology; and ecology, evolution, and systematics. Students wishing to obtain teacher certification complete a concentration in Teacher Licensure. The Biology Concentration also offers field courses on tropical ecosystems in Ecuador and on marine invertebrate communities in Oregon. The Department of Biology operates the only electron microscope facility in the area. Graduates of our program pursue careers in the medical field, plant pathology, wildlife biology, cell biology or biotechnology, among just a few of the career options available with a Biology degree from Colorado Mesa University.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Demonstrate a breadth of knowledge in the life sciences with an accompanying depth of knowledge particularly in the key areas of cell and molecular biology, organismal diversity, ecology, evolution and genetics. (Specialized Knowledge)
2. Utilize the scientific approach to address novel questions and problems through the development of hypotheses, design of experiments, collection of data, analysis of data, and interpretation of results. (Quantitative Fluency/Applied Learning)
3. Identify, examine, evaluate and discuss the scientific literature. (Critical Thinking)
4. Articulate biological principles and ideas effectively, both in written and oral form. (Communication Fluency)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
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The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- A “C” or higher is required in all major courses and Foundation courses.
- Foundation courses should be completed by the end of the sophomore year.
- Topics courses (BIOL 196/296/396/496) may not be used as Additional Biology Courses but must be used for elective credit.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 113 - College Algebra (4)* or higher
  *3 credits apply to the Essential Learning requirements and 1 credit applies to elective credit.
  Professional schools (medical, veterinary, dental) may require one or two semesters of calculus. MATH 151 and MATH 152 will fulfill the Mathematics requirement.

Humanities (3 semester hours)
- Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

History (3 semester hours)
- Select one History course (3)

Fine Arts (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (17 semester hours, must pass all courses with a grade of “C” or higher)
- BIOL 105 - Attributes of Living Systems (3)
- BIOL 105L - Attributes of Living Systems Laboratory (1)
- CHEM 131 - General Chemistry I (4)*
- CHEM 131L - General Chemistry I Lab (1)*
- CHEM 132 - General Chemistry II (4)*
- CHEM 132L - General Chemistry II Lab (1)*
- One of the following courses:
  - STAT 200 - Probability and Statistics (3)
  - MATH 146 - Calculus for Biological Sciences (5)**
* A higher-level subject may be taken in the same category with advisor approval.
** If MATH 146 is taken, 3 credits apply to Foundation and 2 credits apply to electives.
BS, BIOLOGICAL SCIENCES, BIOLOGY REQUIREMENTS (48 semester hours, must pass all courses with a grade of “C” or higher)

Core (10 semester hours)
- BIOL 208 - Ecology and Evolution (3)
- BIOL 208L - Ecology and Evolution Laboratory (1)
- BIOL 301 - Principles of Genetics (3)
- BIOL 301L - Principles of Genetics Laboratory (1)
- BIOL 483 - Senior Thesis (2)

Required Related Study Area (18 semester hours)
- BIOL 106 - Principles of Animal Biology (3)
- BIOL 106L - Principles of Animal Biology Laboratory (1)
- BIOL 107 - Principles of Plant Biology (3)
- BIOL 107L - Principles of Plant Biology Laboratory (1)
- PHYS 111 - General Physics (4)*
- PHYS 111L - General Physics Laboratory (1)*
- PHYS 112 - General Physics II (4)*
- PHYS 112L - General Physics II Laboratory (1)*

* A higher-level subject may be taken in the same category with advisor approval.

Additional Biology Courses (20 semester hours)
Select 20 semester hours from at least three of the following four categories. At least 50% must be at the 300-Level or above. At least one of the following must be included: BIOL 302, BIOL 341/341L, or BIOL 421/421L. Topics courses (BIOL 196/296/396/496) may not be used as Additional Biology Courses but must be used for elective credit.

Category 1: Cellular, Developmental, and Molecular
- BIOL 302 - Cellular Biology (3)
- BIOL 310/310L - Developmental Biology and Laboratory (5)
- BIOL 343 - Immunology (3)
- BIOL 344/344L - Forensic Molecular Biology and Laboratory (4)
- BIOL 371L - Laboratory Investigations in Cellular and Molecular Biology (3)
- BIOL 425 - Molecular Genetics (3)
- BIOL 442 - Pharmacology (3)
- CHEM 315/315L - Biochemistry I and Laboratory (4)

Category 2: Organismal
- BIOL 250/250L - Intro to Microbiology and Laboratory (4)
- BIOL 316/316L - Animal Behavior and Laboratory (4)
- BIOL 322/322L - Plant Identification and Laboratory (4)
- BIOL 331/331L - Insect Biology and Laboratory (5)
- BIOL 333 - Marine Biology (3)
- BIOL 335/335L - Invertebrate Zoology and Laboratory (4)
- BIOL 336/336L - Fish Biology and Laboratory (4)
- BIOL 338 - Small Mammal Biology (3)
- BIOL 350/350L - Microbiology and Laboratory (4)
- BIOL 411/411L - Mammalogy and Laboratory (4)
- BIOL 412/412L - Ornithology and Laboratory (4)
- BIOL 413/413L - Herpetology and Laboratory (4)
- BIOL 431/431L - Animal Parasitology and Laboratory (4)
- BIOL 433 - Marine Invertebrate Communities (3)
- BIOL 450/450L - Mycology and Laboratory (5)

Category 3: Anatomical and Physiological
- BIOL 209/209L - Human Anatomy & Physiology I and Laboratory (4)
- BIOL 210/210L - Human Anatomy & Physiology II and Laboratory (4)
BIOL 241 - Pathophysiology (4)
BIOL 341/341L - General Physiology and Laboratory (4)
BIOL 409/409L - Gross and Developmental Human Anatomy and Laboratory (4)
BIOL 410/410L - Human Osteology and Laboratory (4)
BIOL 421/421L - Plant Physiology and Laboratory (4)
BIOL 423/423L - Plant Anatomy and Laboratory (5)
BIOL 441 - Endocrinology (3)

Category 4: Ecology, Evolution, and Systematics
BIOL 211/211L - Ecosystem Biology and Laboratory (5)
BIOL 315 - Epidemiology (3)
BIOL 320 - Plant Systematics (3)
BIOL 321/321L - Taxonomy of Grasses and Laboratory (4)
BIOL 403 - Evolution (3)
BIOL 405/405L - Adv. Ecological Methods and Laboratory (5)
BIOL 406 - Plant-Animal Interactions (3)
BIOL 407 - Tropical Field Biology (3-5)
BIOL 408 - Desert Ecology (3)
BIOL 414/414L - Freshwater Ecology and Laboratory (4)
BIOL 415 - Tropical Ecosystems (2)
BIOL 418/418L - Wildlife Management and Laboratory (5)

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours, including 40 upper-division credit hours. 18 semester hours; up to 24 hours of upper-division may be needed. It is strongly recommended that all electives be upper-division. Professional schools (medical, veterinary, dental) may require one or two semesters of organic chemistry, which may be taken to fulfill part of electives.)

☐ MATH 113 - College Algebra (1)

☐ ______________________________________________________________
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☐ ______________________________________________________________

2019-20 BS, Biological Sciences, Biology (3410). Posted:
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits
- BIOL 105 - Attributes of Living Systems (3) and BIOL 105L - Attributes of Living Systems Laboratory (1)
- CHEM 131 - General Chemistry I (4) and CHEM 131L - General Chemistry I Laboratory (1)
- KINA Activity (1)
- KINE 100 - Health and Wellness (1)
- MATH 113 - College Algebra (4)

Freshman Year, Spring Semester: 17 credits
- BIOL 106 - Principles of Animal Biology (3) and BIOL 106L - Principles of Animal Biology Laboratory (1)
- CHEM 132 - General Chemistry II (4) and CHEM 132L - General Chemistry II Laboratory (1)
- Essential Learning - Fine Arts (3)
- STAT 200 - Probability and Statistics (3) or MATH 146 - Calculus for Biological Sciences (5)

Sophomore Year, Fall Semester: 15 credits
- BIOL 107 - Principles of Plant Biology (3) and BIOL 107L - Principles of Plant Biology Laboratory (1)
- ENGL 111 - English Composition (3)
- Essential Learning - Social and Behavioral Sciences (3)
- PHYS 111 - General Physics (4) and PHYS 111L - General Physics Laboratory (1)

Sophomore Year, Spring Semester: 15 credits
- BIOL 208 - Ecology and Evolution (3) or BIOL 208L - Ecology and Evolution Laboratory (1)
- ENGL 112 - English Composition (3)
- Essential Learning - History (3)
- PHYS 112 - General Physics II (4) and PHYS 112L - General Physics II Laboratory (1)

Junior Year, Fall Semester: 15 credits
- Additional Biology Courses (2 courses) (7)
- BIOL 301 - Principles of Genetics (3) or BIOL 301L - Principles of Genetics Laboratory (1)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

Junior Year, Spring Semester: 16 credits
- Additional Biology Courses (2 courses) (7)
- Essential Learning - Social and Behavioral Sciences (3)
- Essential Learning - Humanities (3)
- General Elective (3)

Senior Year, Fall Semester: 15 credits
- Additional Biology Courses (2 courses) (6)
- Essential Learning - Natural Science (3)
- General Electives (2 courses) (6)

Senior Year, Spring Semester: 12-14 credits
- BIOL 483 - Senior Thesis (2)
- Essential Learning - Natural Science with Lab (4)
- General Electives (2-3 courses) (6-8)
Program Modification

Biological Sciences-Cellular, Molecular, and Developmental Biology: 3414

Degree Type: BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:

Include new course, BIOL 338 Small Mammal Biology, as a listed option for restricted electives.

Justification:

While the Biology course offerings include a variety of organism-specific courses, such as ornithology, fish biology, herpetology and mammology, none specifically cover this unique, diverse and ecologically important group of animals. The addition of BIOL 338 Small Mammal Biology will give students with an interest in wildlife another option in their restricted electives under "Additional Biology Courses".

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☑ No ☐

Discussions with affected departments:

NA

Proposed by: Stephanie Matlock

Director of Teacher Education Signature: 

Expected Implementation: Fall 2019
About This Major . . .
The Bachelor of Science degree with a Biological Sciences major provides a broad background in the biological sciences. Students choose biology courses from four categories: cellular, molecular, and developmental biology; anatomical and physiological biology; organismal biology; and ecology, evolution, and systematics. The Cellular, Molecular, and Developmental Biology Concentration will provide a solid background in cell and molecular biology, genetics, and biochemistry. The concentration prepares graduates of this program for careers in the medical field, cell biology, and biotechnology, which are just a few of the career options available.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Demonstrate a breadth of knowledge in the life sciences with an accompanying depth of knowledge particularly in the key areas of cell and molecular biology, ecology, evolution, and genetics. (Specialized Knowledge)
2. Utilize the scientific approach to address novel questions and problems through the development of hypotheses, design of experiments, collection of data, analysis of data, and interpretation of results. (Quantitative Fluency/Applied Learning)
3. Identify, examine, evaluate, and discuss the scientific literature. (Critical Thinking)
4. Articulate biological principles and ideas effectively, both in written and oral form. (Communication Fluency)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- A “C” or higher is required in all major courses and Foundation courses.
- Foundation courses should be completed by the end of the sophomore year.
- Topics courses (BIOL 196/296/396/496) as well as research courses (BIOL 387/487), internships (BIOL 499), teaching practicum (BIOL 493), and independent study (BIOL 495) may not be used as Additional Biology Courses but must be used for elective credit.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 151 - Calculus I (5)
  3 credits apply to the Essential Learning requirements and 2 credits apply to elective credit.

Humanities (3 semester hours)
- Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)
CHEM 131/131L and CHEM 132/132L are recommended. Both are prerequisites for upper level chemistry. If chosen, 7 credits apply to the Essential Learning requirement and 3 credits apply to electives.

History (3 semester hours)
- Select one History course (3)

Fine Arts (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (17-19 semester hours, must pass all courses with a grade of “C” or higher)
- BIOL 105 - Attributes of Living Systems (3)
- BIOL 105L - Attributes of Living Systems Laboratory (1)
- PHYS 111 - General Physics I (4)*
- PHYS 111L - General Physics I Laboratory (1)*
- PHYS 112 - General Physics II (4)*
- PHYS 112 - General Physics II Laboratory (1)*
- One of the following courses:
  STAT 200 - Probability and Statistics (3)
  MATH 152 - Calculus II (5)
* A higher-level subject can be taken in the same category with advisor approval.
BS, BIOLOGICAL SCIENCES, BIOLOGY REQUIREMENTS (53 semester hours, must pass all courses with a grade of “C” or higher)

Core (10 semester hours)
- BIOL 208 - Fundamentals of Ecology and Evolution (3)
- BIOL 208L - Fundamentals of Ecology and Evolution Laboratory (1)
- BIOL 301 - Principles of Genetics (3)
- BIOL 301L - Principles of Genetics Laboratory (1)
- BIOL 483 - Senior Thesis (2)

Required Related Study Area (31 semester hours)
- BIOL 108 - Diversity of Organisms (3) and BIOL 108L - Diversity of Organisms Laboratory (1)
- BIOL 302 - Cellular Biology (3)
- BIOL 310 - Developmental Biology (3)
- BIOL 310L - Developmental Biology Laboratory (2)
- BIOL 371L - Laboratory Investigations in Cellular and Molecular Biology (3)
- BIOL 425 - Molecular Genetics (3)
- CHEM 311 - Organic Chemistry I (4)*
- CHEM 311L - Organic Chemistry I Laboratory (1)*
- CHEM 312 - Organic Chemistry II (4)*
- CHEM 312L - Organic Chemistry II Laboratory (1)*
- CHEM 315 - Biochemistry I (3)


Additional Biology Courses (12 semester hours)
Select 12 semester hours from the following lists. Topics courses (BIOL 196/296/396/496) may not be used as Additional Biology Courses but must be used for elective credit.

Category 1: Cellular, Developmental, and Molecular
- BIOL 343 - Immunology (3)
- BIOL 344/344L - Forensic Molecular Biology and Laboratory (4)
- BIOL 442 - Pharmacology (3)
- CHEM 315L - Biochemistry I Laboratory (1)
- CHEM 316 - Biochemistry II (3)

Category 2: Organismal
- BIOL 250/250L - Intro to Microbiology and Laboratory (4)
- BIOL 316/316L - Animal Behavior and Laboratory (4)
- BIOL 322/322L - Plant Identification and Laboratory (4)
- BIOL 331/331L - Insect Biology and Laboratory (5)
- BIOL 333 - Marine Biology (3)
- BIOL 335/335L - Invertebrate Zoology and Laboratory (4)
- BIOL 336/336L - Fish Biology and Laboratory (4)
- BIOL 338 - Small Mammal Biology (3)
- BIOL 350/350L - Microbiology and Laboratory (4)
- BIOL 411/411L - Mammalogy and Laboratory (4)
- BIOL 412/412L - Ornithology and Laboratory (4)
- BIOL 413/413L - Herpetology and Laboratory (4)
- BIOL 431/431L - Animal Parasitology and Laboratory (4)
- BIOL 433 - Marine Invertebrate Communities (3)
- BIOL 450/450L - Mycology and Laboratory (5)

Category 3: Anatomical and Physiological
- BIOL 209/209L - Human Anatomy & Physiology I and Laboratory (4)
- BIOL 210/210L - Human Anatomy & Physiology II and Laboratory (4)
- BIOL 241 - Pathophysiology (4)
- BIOL 341/341L - General Physiology and Laboratory (4)
BIOL 409/409L - Gross and Developmental Human Anatomy and Laboratory (4)
BIOL 410/410L - Human Osteology and Laboratory (4)
BIOL 421/421L - Plant Physiology and Laboratory (4)
BIOL 423/423L - Plant Anatomy and Laboratory (5)
BIOL 441 - Endocrinology (3)

Category 4: Ecology, Evolution, and Systematics
BIOL 211/211L - Ecosystem Biology and Laboratory (5)
BIOL 315 - Epidemiology (3)
BIOL 320 - Plant Systematics (3)
BIOL 321/321L - Taxonomy of Grasses and Laboratory (4)
BIOL 403 - Evolution (3)
BIOL 405/405L - Advanced Ecological Methods and Laboratory (5)
BIOL 406 - Plant-Animal Interactions (3)
BIOL 407 - Tropical Field Biology (3-5)
BIOL 408 - Desert Ecology (3)
BIOL 414/414L - Freshwater Ecology and Laboratory (4)
BIOL 415 - Tropical Ecosystems (2)
BIOL 418/418L - Wildlife Management and Laboratory (5)

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours, including 40 upper-division hours. 11-13 semester hours; up to 7 hours of upper division may be needed. Research courses are recommended.)

☐ CHEM 131/131L/132/132L (3)
☐ MATH 151 - Calculus I (2)

☐ ________________________________
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SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits
- BIOL 105 - Attributes of Living Systems (3) and BIOL 105L - Attributes of Living Systems Laboratory (1)
- CHEM 131 - General Chemistry (4) and CHEM 131L - General Chemistry Laboratory (1)
- KINE 100 - Health and Wellness (1)
- MATH 151 - Calculus I (5)

Freshman Year, Spring Semester: 17 credits
- BIOL 108 – Diversity of Organisms (3) and BIOL 108L - Diversity of Organisms Laboratory (1)
- CHEM 132 - General Chemistry II (4) and CHEM 132L - General Chemistry II Laboratory (1)
- ENGL 111 - English Composition (3)
- STAT 200 - Probability and Statistics (3) or MATH 152 - Calculus II (5)

Sophomore Year, Fall Semester: 15 credits
- BIOL 208 - Ecology and Evolution (3) or BIOL 208L - Ecology and Evolution Laboratory (1)
- CHEM 311 - Organic Chemistry I (4) and CHEM 311L - Organic Chemistry I Laboratory (1)
- ENGL 112 - English Composition (3)
- Essential Learning - Social and Behavioral Sciences (3)

Sophomore Year, Spring Semester: 15 credits
- BIOL 301 - Principles of Genetics (3) and BIOL 301L - Principles of Genetics Laboratory (1)
- CHEM 312 - Organic Chemistry II (4) and CHEM 312L - Organic Chemistry II Laboratory (1)
- Essential Learning - History (3)
- Essential Learning - Humanities (3)

Junior Year, Fall Semester: 15 credits
- BIOL 302 - Cellular Biology (3)
- CHEM 315 - Biochemistry I (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- PHYS 111 - General Physics (4) and PHYS 111L - General Physics Laboratory (1)

Junior Year, Spring Semester: 14 credits
- BIOL 310 - Developmental Biology (3) and BIOL 310L - Developmental Biology Laboratory (2)
- Essential Learning - Social and Behavioral Sciences (3)
- KINA Activity (1)
- PHYS 112 - General Physics II (4) and PHYS 112L - General Physics II Laboratory (1)

Senior Year, Fall Semester: 15 credits
- Additional Biology Course (4)
- BIOL 371L - Laboratory Investigations in Cellular and Molecular Biology (3)
- General Electives (2 courses) (5)
- Essential Learning - Fine Arts (3)

Senior Year, Spring Semester: 14-16 credits
- Additional Biology Courses (8)
- BIOL 425 - Molecular Genetics (3)
- BIOL 483 - Senior Thesis (2)
- General Elective (1-3)
Program Modification

Biological Sciences-Ecology, Evolution and Organismal Biology: 3409

Degree Type: BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:
Include new course, BIOL 338 Small Mammal Biology, as a listed option for restricted electives.

Justification:
While the Biology course offerings include a variety of organism-specific courses, such as ornithology, fish biology, herpetology and mammology, none specifically cover this unique, diverse and ecologically important group of animals. The addition of BIOL 338 Small Mammal Biology will give students with an interest in wildlife another option in their restricted electives under "Additional Biology Courses".

Revision to SLOs: Yes ☑ No ☐

Other changes: Yes ☑ No ☐

Discussions with affected departments:
NA

Proposed by: Stephanie Matlock

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Major . . .
The Bachelor of Science degree with a Biological Sciences major provides a broad background in the biological sciences. Students choose biology courses from four categories: cellular, molecular, and developmental biology; anatomical and physiological biology; organismal biology; and ecology, evolution, and systematics. The Ecology, Evolution, and Organismal Biology Concentration will provide a solid background in ecology and evolution, and offers field courses in a variety of areas, in addition to internships and research opportunities. Graduates of this program may pursue careers in ecology, plant biology, fish and wildlife biology, and evolutionary biology, which are just a few of the career options available.

For more information on what you can do with this major, go to [http://www.coloradomesa.edu/career/whatmajor.html](http://www.coloradomesa.edu/career/whatmajor.html)

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Demonstrate a breadth of knowledge in the life sciences with an accompanying depth of knowledge particularly in the key areas of organismal diversity, ecology, evolution, and genetics. (Specialized Knowledge)
2. Utilize the scientific approach to address novel questions and problems through the development of hypotheses, design of experiments, collection of data, analysis of data, and interpretation of results. (Quantitative Fluency/Applied Learning)
3. Identify, examine, evaluate, and discuss the scientific literature. (Critical Thinking)
4. Articulate biological principles and ideas effectively, both in written and oral form. (Communication Fluency)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at [http://www.coloradomesa.edu/registrar/graduation.html](http://www.coloradomesa.edu/registrar/graduation.html).

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS
- A “C” or higher is required in all major courses and Foundation courses.
- Foundation courses should be completed by the end of the sophomore year.
- Topics courses (BIOL 196/296/396/496) as well as research courses (BIOL 387/487), internships (BIOL 499), teaching practicums (BIOL 493), and independent study (BIOL 495) may not be used as Additional Biology Courses but must be used for elective credit.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 113 - College Algebra (3) or higher
  3 credits apply to the Essential Learning requirements and 1 credit applies to elective credit.

Humanities (3 semester hours)
- Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)
  PHYS 112/112L is typically required for admission to graduate schools. If chosen, 4 credits apply to the Essential Learning requirement and 1 credit applies to elective credit.

History (3 semester hours)
- Select one History course (3)

Fine Arts (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (17-19 semester hours, must pass all courses with a grade of “C” or higher)
- BIOL 105 - Attributes of Living Systems (3)
- BIOL 105L - Attributes of Living Systems Laboratory (1)
- CHEM 131 - General Chemistry I (4)*
- CHEM 131L - General Chemistry I Laboratory (1)*
- CHEM 132 - General Chemistry II (4)*
- CHEM 132L - General Chemistry II Laboratory (1)*
- One of the following courses:
  STAT 200 - Probability and Statistics (3)**
  MATH 151 - Calculus I (5)**
* A higher-level subject may be taken in the same category with advisor approval. Organic Chemistry may be required for admission to some graduate programs.
** Statistics and Calculus may be required for admission to some graduate programs.
BS, BIOLOGICAL SCIENCES, BIOLOGY REQUIREMENTS (51 semester hours, must pass all courses with a grade of "C" or higher)

Core (10 semester hours)
- BIOL 208 - Fundamentals of Ecology and Evolution (3)
- BIOL 208L - Fundamentals of Ecology and Evolution Laboratory (1)
- BIOL 301 - Principles of Genetics (3)
- BIOL 301L - Principles of Genetics Laboratory (1)
- BIOL 483 - Senior Thesis (2)

Required Related Study Area (21 semester hours)
- BIOL 106 - Principles of Animal Biology (3)
- BIOL 106L - Principles of Animal Biology Laboratory (1)
- BIOL 107 - Principles of Plant Biology (3)
- BIOL 107L - Principles of Plant Biology Laboratory (1)
- BIOL 403 - Evolution (3)
- BIOL 405 - Advanced Ecological Methods (3)
- BIOL 405L - Advanced Ecological Methods Laboratory (2)
- PHYS 111 - General Physics (4)
- PHYS 111L - General Physics Laboratory (1)

Additional Biology Courses (20 semester hours)
Select 20 semester hours, chosen from the lists below. At least 16 hours must be 300-level or above. Topics courses (BIOL 196/296/396/496) may not be used as Additional Biology Courses but must be used for elective credit.

Category 1: Cellular, Developmental, and Molecular
- BIOL 302 - Cellular Biology (3)
- BIOL 310/310L - Developmental Biology and Laboratory (5)
- BIOL 343 - Immunology (3)
- BIOL 344/344L - Forensic Molecular Biology and Laboratory (4)
- BIOL 371L - Laboratory Investigations in Cellular and Molecular Biology (3)
- BIOL 425 - Molecular Genetics (3)
- BIOL 442 - Pharmacology (3)
- CHEM 315/315L - Biochemistry I and Laboratory (4)
- CHEM 316 - Biochemistry II (3)

Category 2: Organismal
- BIOL 250/250L - Intro to Microbiology and Laboratory (4)
- BIOL 316/316L - Animal Behavior and Laboratory (4)
- BIOL 322/322L - Plant Identification and Laboratory (4)
- BIOL 331/331L - Insect Biology and Laboratory (5)
- BIOL 333 - Marine Biology (3)
- BIOL 335/335L - Invertebrate Zoology and Laboratory (4)
- BIOL 336/336L - Fish Biology and Laboratory (4)
- **BIOL 338** - Small Mammal Biology (3)
- BIOL 350/350L - Microbiology and Laboratory (4)
- BIOL 411/411L - Mammalogy and Laboratory (4)
- BIOL 412/412L - Ornithology and Laboratory (4)
- BIOL 413/413L - Herpetology and Laboratory (4)
- BIOL 431/431L - Animal Parasitology and Laboratory (4)
- BIOL 433 - Marine Invertebrate Communities (3)
- BIOL 450/450L - Mycology and Laboratory (5)

Category 3: Anatomical and Physiological
- BIOL 209/209L - Human Anatomy & Physiology I and Laboratory (4)
- BIOL 210/210L - Human Anatomy & Physiology II and Laboratory (4)
- BIOL 241 - Pathophysiology (4)
BIOL 341/341L - General Physiology and Laboratory (4)
BIOL 409/409L - Gross and Developmental Human Anatomy and Laboratory (4)
BIOL 410/410L - Human Osteology and Laboratory (4)
BIOL 421/421L - Plant Physiology and Laboratory (4)
BIOL 423/423L - Plant Anatomy and Laboratory (5)
BIOL 441 - Endocrinology (3)

Category 4: Ecology, Evolution, and Systematics
BIOL 211/211L - Ecosystem Biology and Laboratory (5)
BIOL 315 - Epidemiology (3)
BIOL 320 - Plant Systematics (3)
BIOL 321/321L - Taxonomy of Grasses and Laboratory (4)
BIOL 406 - Plant-Animal Interactions (3)
BIOL 407 - Tropical Field Biology (3-5)
BIOL 408 - Desert Ecology (3)
BIOL 414/414L - Freshwater Ecology and Laboratory (4)
BIOL 415 - Tropical Ecosystems (2)
BIOL 418/418L - Wildlife Management and Laboratory (5)
GEOL 305 - Cartography for GIS (1)
GEOG 131 - Introduction to Cartography (3)
GIST 332/332L - Introduction to GIS and Laboratory (3)

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours, including 40 upper-division hours. 13-15 semester hours; up to 10 hours of upper division may be needed. BIOL 499 internship or research courses are recommended.)

☐ MATH 113 - College Algebra (1)
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 14 credits
- BIOL 105 - Attributes of Living Systems (3) and BIOL 105L - Attributes of Living Systems Laboratory (1)
- CHEM 131 - General Chemistry I (4) and CHEM 131L - General Chemistry I Laboratory (1)
- KINE 100 - Health and Wellness (1)
- MATH 113 - College Algebra (4)

Freshman Year, Spring Semester: 15-17 credits
- BIOL 106 - Principles of Animal Biology (3) and BIOL 106L - Principles of Animal Biology Laboratory (1)
- CHEM 132 - General Chemistry II (4) and CHEM 132L - General Chemistry II Laboratory (1)
- ENGL 111 - English Composition (3)
- STAT 200 - Probability and Statistics (3) or MATH 151 - Calculus I (5)

Sophomore Year, Fall Semester: 15 credits
- BIOL 107 - Principles of Plant Biology (3) and BIOL 107L - Principles of Plant Biology Laboratory (1)
- ENGL 112 - English Composition (3)
- Essential Learning - Social and Behavioral Sciences (3)
- PHYS 111 - General Physics (4) and PHYS 111L - General Physics Laboratory (1)

Sophomore Year, Spring Semester: 14 credits
- BIOL 208 - Ecology and Evolution (3) and BIOL 208L - Ecology and Evolution Laboratory (1)
- BIOL 301 - Principles of Genetics (3) and BIOL 301L - Principles of Genetics Laboratory (1)
- KINA Activity (1)
- PHYS 112 - General Physics II (4) and PHYS 112L - General Physics II Laboratory (1)

Junior Year, Fall Semester: 16 credits
- Additional Biology Courses (6)
- BIOL 403 - Evolution (3)
- Essential Learning - History (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

Junior Year, Spring Semester: 15 credits
- BIOL 405 - Advanced Ecological Methods (3) and BIOL 405L - Advanced Ecological Methods Laboratory (2)
- Essential Learning - Social and Behavioral Sciences (3)
- Essential Learning - Humanities (3)
- General Electives (4)

Senior Year, Fall Semester: 16 credits
- Additional Biology Courses (7)
- Essential Learning - Fine Arts (3)
- Essential Learning - Natural Science (3)
- General Elective (3)

Senior Year, Spring Semester: 13-15 credits
- Additional Biology Courses (7)
- BIOL 483 - Senior Thesis (2)
- General Electives (4-6)
Program Modification

Biological Sciences-Secondary Education: 3412

Degree Type: BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:

1. Changing Program Outcomes for Center for Teacher Education.
2. Add program requirement about passing Praxis II prior to student teaching (internship) semester.

Justification:

1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.

Revision to SLOs: Yes ☑ No ☐

Teacher Education Program Outcomes:

1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☑ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:

The Biology Department and The Center for Teacher Education have both approved these changes as of January 29, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Science
Major: Biological Sciences
Concentration: Biology, Secondary Education

About This Major . . .
The Biology program offers coursework, in conjunction with the Center for Teacher Education, leading to licensure in secondary education science. Graduates of the program can teach in the state of Colorado or use their teaching expertise in other careers. After completing foundation sciences classes in Biology, Chemistry, Physics and Geology, students choose 10 hours of upper level Biology course work, in consultation with their advisor.

The secondary licensure program provides teacher education candidates with broad content knowledge in science and prepares them as teachers for grades 7 through 12. A minimum of 75 credit hours of Essential Learning and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education secondary licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria. EDUC 115, What It Means to be an Educator, and EDUC 215, Teaching as a Profession, must be taken before applying to the program.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

Biological Sciences Outcomes:
1. Utilize the scientific approach to address novel questions and problems through the development of hypotheses, design of experiments, collection of data, analysis of data, and interpretation of results. (Quantitative Fluency/Applied Learning)
2. Identify, examine, evaluate and discuss the scientific literature. (Critical Thinking)
3. Articulate biological principles and ideas effectively, both in written and oral form. (Communication Fluency)

Teacher Education Outcomes:
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical
to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.
Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.
If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.80 cumulative GPA or higher in all CMU coursework.
- 2.80 cumulative GPA or higher in coursework toward the major content area.
- All EDUC prefix courses must be completed with a grade of B or better.
- A grade of C or better must be earned in all required courses, unless otherwise stated.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “B” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 113 - College Algebra (4) or higher
  3 credits apply to the Essential Learning requirements and one credit applies to the required related study area.

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- PSYC 233 - Human Growth and Development (3) (must receive a grade of “B” or better)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab, must be completed with a grade of “C” or better.)
- One of the following courses:
  - ENVS 101 - Introduction to Environmental Science (3)
  - GEOG 103 - Weather and Climate (3)
  - GEOG 104 - Oceanography (3)
  - GEOG 105 - Geology of Colorado (3)
  - PHYS 101 - Elementary Astronomy (3)
- BIOL 105 - Attributes of Living Systems (3)
- BIOL 105L - Attributes of Living Systems Laboratory (1)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (13 semester hours, must pass all courses with a grade of “C” or higher.)
- CHEM 121 - Principles of Chemistry (4)*
- CHEM 121L - Principles of Chemistry Laboratory (1)*
- CHEM 122 - Principles of Organic Chemistry (4)*
- CHEM 122L - Principles of Organic Chemistry Laboratory (1)*
- STAT 200 - Probability and Statistics (3)

* A higher-level subject may be taken in the same category with advisor approval.
BS, BIOLOGICAL SCIENCES, BIOLOGY SECONDARY EDUCATION REQUIREMENTS (40 semester hours, must pass all courses with a grade of “C” or higher)

Required Core Courses (13 semester hours)
- BIOL 106 - Principles of Animal Biology (3)
- BIOL 106L - Principles of Animal Biology Laboratory (1)
- BIOL 107 - Principles of Plant Biology (3)
- BIOL 107L - Principles of Plant Biology Laboratory (1)
- BIOL 385 - Nature and Philosophy of Science (3)
- BIOL 483 - Senior Thesis (2)

Required Related Study Area (19 semester hours)
- MATH 113 - College Algebra (1)
- One of the following sets of courses:
  - GEOL 111 - Principles of Physical Geology (3) with GEOL 111L - Principles of Physical Geology Laboratory (1)
  - GEOL 113 - Field-Based Intro to Physical Geology (3) with GEOL 113L - Field-Based Intro to Physical Geology Laboratory (1)
  - GEOL 112 - Principles of Historical Geology (3)
  - GEOL 112L - Principles of Historical Geology Laboratory (1)
  - PHYS 111 - General Physics (4)
  - PHYS 111L - General Physics Laboratory (1)
  - PHYS 112 - General Physics II (4)
  - PHYS 112L - General Physics II Laboratory (1)

Biology Electives (8 semester hours)
Select 8 semester hours of upper division BIOL courses:
- __________________________________________________________
- __________________________________________________________
- __________________________________________________________
- __________________________________________________________

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 1 semester hour)
- __________________________________________________________

SECONDARY EDUCATION REQUIREMENTS (29 semester hours, must pass all EDUC courses with a grade of “B” or higher.)
Program Requirements: ENGL 111, ENGL 112, PSYC 233, EDUC 115, and EDUC 215 (all with a grade of B or better) and formal acceptance to the Teacher Education Program.
- EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
- EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3) (20 field experience hours)
- EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
- EDUC 442 - Integrating Literacy across the Curriculum: Secondary and K-12 Art (3) (60 field experience hours)
- EDUC 475 - Classroom Management (1)
- EDUC 497 - Content Methodology Practicum (3) (80 field experience hours)
- EDUC 497D - Methods of Teaching Secondary Science (2)
  This course is only offered in the fall semester. It may be taken with either the 300-level or 400-level EDUC courses but must be taken before the student teaching semester.
- EDUC 499G - Teaching Internship and Colloquia: Secondary (12) (600 field experience hours)

- Praxis II Exam Passed
All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must PASS the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.
### SUGGESTED COURSE SEQUENCING

**Freshman Year, Fall Semester: 16 credits**
- BIOL 105 - Attributes of Living Systems (3) and BIOL 105L - Attributes of Living Systems Laboratory (1)
- ENGL 111 - English Composition (3)
- CHEM 121 - Principles of Chemistry (4) and CHEM 121L - Principles of Chemistry Laboratory (1)
- MATH 113 - College Algebra (4)

**Freshman Year, Spring Semester: 16 credits**
- BIOL 106 - Principles of Animal Biology (3) and BIOL 106L - Principles of Animal Biology Laboratory (1)
- ENGL 112 - English Composition (3)
- CHEM 122 - Principles of Organic Chemistry (4) and CHEM 122L - Principles of Organic Chemistry Laboratory (1)
- STAT 200 - Probability and Statistics (3)
- EDUC 115 - What It Means to be an Educator (1)

**Sophomore Year, Fall Semester: 16 credits**
- BIOL 107 - Principles of Plant Biology (3) and BIOL 107L - Principles of Plant Biology Laboratory (1)
- PHYS 111 - General Physics (4) and PHYS 111L - General Physics Laboratory (1)
- PSYC 233 - Human Growth and Development (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**Sophomore Year, Spring Semester: 15 credits**
- GEOL 111/111L - Principles of Physical Geology (4) or GEOL 113/113L - Field-Based Introduction to Physical Geology (4)
- PHYS 112 - General Physics II (4) and PHYS 112L - General Physics II Laboratory (1)
- ENVS 101 or GEOL 103 or GEOL 104 or GEOL 105 or PHYS 101 (3)
- EDUC 215 - Teaching as a Profession (1)
- KINA Activity (1)
- KINE 100 - Health and Wellness (1)

**Junior Year, Fall Semester: 14 credits**
- Essential Learning - Social and Behavioral Sciences (3)
- GEOL 112 - Principles of Historical Geology (3) and GEOL 112L - Principles of Historical Geology Laboratory (1)
- Upper Division Biology Elective (4)
- Essential Learning - Humanities (3)

**Junior Year, Spring Semester: 16 credits**
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3)
- EDUC 343 - Teaching to Diversity (3)
- BIOL 385 - Nature and Philosophy of Science (3)
- Upper Division Biology Elective (4)
- Essential Learning - History (3)

**Senior Year, Fall Semester: 15 credits**
- BIOL 483 - Senior Thesis (2)
- General Elective (1)
- Essential Learning - Fine Arts (3)
- EDUC 442 - Integrating Literacy Across the Curriculum (3)
- EDUC 475 - Classroom Management (1)
- EDUC 497 - Content Methodology Practicum (3)
- EDUC 497D - Methods of Teaching Secondary Science (2)

**Senior Year, Spring Semester: 12 credits**
- EDUC 499G - Teaching Internship and Colloquia (12)

2019-20 BS, Biological Sciences, Biology Secondary Education (3412). Posted:
**Course Additions**

REAL 350  
**Credit Hours:** 3

**Course Title:** Real Estate Fundamentals  
**Abbreviated Title:** Real Estate Fundamentals

**Contact hours per week:**  
- Lecture: 3  
- Lab:  
- Field:  
- Studio:  
- Other:  

**Type of Instructional Activity:** Lecture

**Academic engagement minutes:** 2250  
**Student preparation minutes:** 4500

**Intended semesters for offering this course:**  
- Fall ☑  
- J-Term ☐  
- Spring ☑  
- Summer ☐

**Intended semester to offer course 1st time:** Fall 2019

**Number of times course may be taken for credit:** 1

**Essential Learning Course:** Yes ☑  No ☐

**Prerequisites:** Yes ☑  No ☐

**Prerequisite for other course(s):** Yes ☑  No ☐

**Co-requisites:** Yes ☑  No ☐

**Requirement or listed choice for any program of study:** Yes ☑  No ☐

**Course is a requirement for a new program:**  
- New Certificate - Professional Certificate in Real Estate

**Overlapping content with present courses offered on campus:** Yes ☑  No ☐

**Additional faculty FTE required:** Yes ☑  No ☐

**Additional equipment required:** Yes ☑  No ☐

**Additional lab facilities required:** Yes ☑  No ☐

**Course description for catalog:**  
Overview of basic components of the real estate industry. Includes industry terminology and basic real estate concepts and principles.

**Justification:**  
This course has been offered as a topics course purposefully to test demand. Students have received the class enthusiastically and not only have taken this class but the two additional topics courses on real estate. All Real Estate classes offered as topics have had between 16-43 students enrolled. Student demand demonstrates course justification.

**Topical course outline:**  
- Real Estate Professions and Professional Organizations  
- Types of Ownership in Real Estate  
- Rights and Interest in Real Estate  
- Encumbrances, Liens and Encroachments  
- Transferring Real Estate  
- Methods of Legal Description  
- Land-Use Planning and Development  
- Marketplace Economics and Market Value  
- Real Estate Finance  
- Real Estate Taxation  
- The Brokerage Business  
- Property Management  
- Real Estate Investment
**Course Additions**

**Student Learning Outcomes:**
1. Define and explain key terminology used in real estate
2. Construct and explain basic real estate principles
3. Relate basic real estate concepts to current events and apply those concepts in critically assessing and discussing current events

**Discussions with affected departments:**
None affected.

| Proposed by       | Dr. Morgan Bridge | Expected Implementation: | Fall 2019 |
Course Additions

REAL 410  Credit Hours  3
Course Title:  Real Estate Finance and Development
Abbreviated Title:  Real Estate Finance/Developmnt
Contact hours per week:  Lecture 3  Lab  Field  Studio  Other
Type of Instructional Activity:  Lecture
Academic engagement minutes:  2250  Student preparation minutes:  4500
Intended semesters for offering this course:  Fall  Yes  J-Term  No  Spring  Yes  Summer  No
Intended semester to offer course 1st time:  Fall 2019
Number of times course may be taken for credit:  1
Essential Learning Course:  Yes  No  ☑
Prerequisites:  Yes  ☑  No  ☑
REAL 350
Prerequisite for other course(s):  Yes  ☑  No  ☑
Co-requisites:  Yes  ☑  No  ☑
Requirement or listed choice for any program of study:  Yes  ☑  No  ☑
Course is a requirement for a new program:
   New Certificate  -  Professional Certificate in Real Estate
Overlapping content with present courses offered on campus:  Yes  ☑  No  ☑
Additional faculty FTE required:  Yes  ☑  No  ☑
Additional equipment required:  Yes  ☑  No  ☑
Additional lab facilities required:  Yes  ☑  No  ☑
Course description for catalog:
Exploration of the process of land development, land packaging and land banking. Analyzes and evaluates real estate financing transactions and opportunities.

Justification:
This course has been offered as a topics course purposefully to test demand. Students have received the class enthusiastically and not only have taken this class but the two additional topics courses on real estate. All Real Estate classes offered as topics have had between 16-43 students enrolled. Student demand demonstrates course justification.

Topical course outline:
The History of Development
Land Banking
Land Packaging
Site Development
Land Development
The Role of the Bank in Real Estate Finance Transactions
Bank Balance Sheet Makeup and Loan Funding
Real Estate Loan Types
Agricultural and Commercial Land Transactions
Loan Monitoring and Regulatory Requirements
Course Additions

Student Learning Outcomes:

Upon completion of this course, a student will be able to:

1. Explain the basics of the land development process
2. Explain in detail land banking, land packaging, and land development
3. Analyze and evaluate real estate financing opportunities
4. Explain and evaluate various types of real estate financing transactions
5. Compare and contrast agricultural, residential and commercial financing options

Discussions with affected departments:

None affected.

Proposed by: Dr. Morgan Bridge

Expected Implementation: Fall 2019
Course Additions

REAL 415
Credit Hours 3

Course Title: Real Estate Valuation and Investment

Abbreviated Title: Real Estate Valuation/Invest

Contact hours per week: Lecture 3 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 2250 Student preparation minutes: 4500

Intended semesters for offering this course: Fall ☑ J-Term ☐ Spring ☑ Summer ☐

Intended semester to offer course 1st time: Fall 2019

Number of times course may be taken for credit: 1

Essential Learning Course: Yes ☑ No ☐

Prerequisites: Yes ☑ No ☐

REAL 350
Prerequisite for other course(s): Yes ☑ No ☐

Co-requisites: Yes ☑ No ☐

Requirement or listed choice for any program of study: Yes ☑ No ☐

Course is a requirement for a new program:

New Certificate - Professional Certificate in Real Estate

Overlapping content with present courses offered on campus: Yes ☑ No ☐

Additional faculty FTE required: Yes ☑ No ☐

Additional equipment required: Yes ☑ No ☐

Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:

Examination of real estate appraisals using the current industry practices. Calculate and analyze real estate investment opportunities and strategies using current industry investment analysis tools.

Justification:

This course has been offered as a topics course purposefully to test demand. Students have received the class enthusiastically and not only have taken this class but the two additional topics courses on real estate. All Real Estate classes offered as topics have had between 16-43 students enrolled.

Student demand demonstrates course justification

Topical course outline:

The Nature of Appraisal
Data Collection and Property Description
The Three Approaches to Value
The Appraisal Report and Review
The Use of Investment Analysis Tools
The Real Estate Cash Flow Model
Financing Real Estate Investments
Analyzing and Evaluating Real Estate Investments

Student Learning Outcomes:

1. Explain the basic process of real estate appraisal
2. List and explain key terminology and models used in the appraisal process
Course Additions

3. Define and apply valuation approaches
4. Explain the basic process of exploring real estate investment opportunities
5. List and explain key terminology and models used in the analysis of investment opportunities
6. Define and apply investment strategies
7. Relate basic valuation and investment concepts to current events and apply those concepts in critically assessing and discussing current valuation and investment events

Discussions with affected departments:
None will be affected.

Proposed by: Dr. Morgan Bridge
Expected Implementation: Fall 2019
Program Additions

Real Estate
  Degree Type:  Professional Cert
  Abbreviated Name:  Real Estate

Proposed by:  Dr. Morgan Bridge

Expected Implementation:  Fall 2019
## Step 1. Enrollment Assumptions

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<td>25</td>
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</tr>
<tr>
<td><strong>In-state FTE</strong></td>
<td>6.00</td>
<td>6.00</td>
<td>6.00</td>
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</tr>
<tr>
<td><strong>Out-of-State FTE</strong></td>
<td>1.50</td>
<td>1.50</td>
<td>1.50</td>
<td>1.50</td>
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</tr>
<tr>
<td><strong>Program FTE</strong></td>
<td>7.50</td>
<td>7.50</td>
<td>7.50</td>
<td>7.50</td>
<td>7.50</td>
</tr>
<tr>
<td><strong>Program Graduates</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>5</td>
<td>8</td>
<td>12</td>
<td>15</td>
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</tbody>
</table>

## Step 1a. Anticipated Credit Hours taken based on recommended course sequencing:

<table>
<thead>
<tr>
<th></th>
<th>Per Student</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In-State Total</strong></td>
<td></td>
<td>180</td>
<td>180</td>
<td>180</td>
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<tr>
<td><strong>Out-of-State Total</strong></td>
<td></td>
<td>45</td>
<td>45</td>
<td>45</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td>225</td>
<td>225</td>
<td>225</td>
<td>225</td>
<td>225</td>
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</table>

## Revenue Rates - Per Credit Hour

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate Tuition</th>
<th>In-State $286.44</th>
<th>$295.04</th>
<th>$309.79</th>
<th>$325.28</th>
<th>$341.54</th>
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</thead>
<tbody>
<tr>
<td>Out-of-State (average)</td>
<td>$476.45</td>
<td>$490.75</td>
<td>$520.19</td>
<td>$551.40</td>
<td>$584.49</td>
<td></td>
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</table>

## Step 2. Program Revenue Projections

<table>
<thead>
<tr>
<th></th>
<th>Tuition - New $34,330</th>
<th>$35,360</th>
<th>$37,349</th>
<th>$39,451</th>
<th>$41,671</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tuition - Existing $38,670</td>
<td>$39,830</td>
<td>$41,821</td>
<td>$43,912</td>
<td>$46,108</td>
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<tr>
<td></td>
<td><strong>Total Tuition</strong> $73,000</td>
<td>$75,190</td>
<td>$79,170</td>
<td>$83,363</td>
<td>$87,779</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Academic Fees - Existing</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Academic Fees - New</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>State and Federal Grants - New</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Donations - New</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other - New</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL PROGRAM REVENUES</strong></td>
<td>$73,000</td>
<td>$75,190</td>
<td>$79,170</td>
<td>$83,363</td>
<td>$87,779</td>
</tr>
</tbody>
</table>
### Program Expenses

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Full-time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Part-time</td>
<td>4,500</td>
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<td>4,500</td>
<td>4,500</td>
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<tr>
<td>FTE</td>
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<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Benefits</td>
<td>990</td>
<td>990</td>
<td>990</td>
<td>990</td>
<td>990</td>
</tr>
<tr>
<td>Administrative and/or Support Staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial Aid (program specific)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Supplies</td>
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<td>Equipment</td>
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<tr>
<td>Travel</td>
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<tr>
<td>Telecommunications</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Other (copier, postage)</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td>5,490</td>
<td>5,490</td>
<td>5,490</td>
<td>5,490</td>
<td>5,490</td>
</tr>
<tr>
<td><strong>Program Start-Up Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Construction</td>
<td></td>
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<td>Equipment</td>
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<td>Library Acquisitions</td>
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<tr>
<td>Other</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Start-Up Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>TOTAL PROGRAM EXPENSES</strong></td>
<td>5,490</td>
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<td>5,490</td>
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<tr>
<td><strong>Institutional Reallocation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Funds in Dept's Budget</td>
<td>(5,490)</td>
<td>(5,490)</td>
<td>(5,490)</td>
<td>(5,490)</td>
<td>(5,490)</td>
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<tr>
<td><strong>Net New Expense Increase</strong></td>
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<td>10,980</td>
<td>10,980</td>
<td>10,980</td>
<td>10,980</td>
</tr>
</tbody>
</table>

### Program Revenue and Expense Summary

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Revenue and Expense</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Revenues</td>
<td>73,000</td>
<td>75,190</td>
<td>79,170</td>
<td>83,363</td>
<td>87,779</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>5,490</td>
<td>5,490</td>
<td>5,490</td>
<td>5,490</td>
<td>5,490</td>
</tr>
<tr>
<td>Revenue less Expenses</td>
<td>67,510</td>
<td>69,700</td>
<td>73,680</td>
<td>77,873</td>
<td>82,289</td>
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<tr>
<td><strong>New Revenue and Expense Impact</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuition</td>
<td>34,330</td>
<td>35,360</td>
<td>37,349</td>
<td>39,451</td>
<td>41,671</td>
</tr>
<tr>
<td>State and Federal Grants</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Donations</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>34,330</td>
<td>35,360</td>
<td>37,349</td>
<td>39,451</td>
<td>41,671</td>
</tr>
<tr>
<td>New Expenses</td>
<td>10,980</td>
<td>10,980</td>
<td>10,980</td>
<td>10,980</td>
<td>10,980</td>
</tr>
</tbody>
</table>

*Excludes other indirect program support services costs.
About This Major . . .
The Certificate in Real Estate offers students invaluable knowledge of the Real Estate Industry, knowledge that can be used both personally and professionally. With over 5 million people currently employed in the real estate industry, this certificate provides opportunities in many differing real estate careers. Students will be provided opportunities to learn all aspects of the industry to include: appraisal and assessment, property management, commercial and residential investment opportunities and management, real estate law, and real estate financing. Students will also learn the tools needed to analyze and evaluate both personal and professional potential real estate investment opportunities. This certificate is not intended to lead to real estate licensure.

For more information on what you can do with this major visit Career Services’ What to Do with a Major? resource.

All CMU certificate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Produce industry appropriate written documentation with the ability to effectively orally communicate real estate information. (Communication Fluency)
2. Construct, apply, and document appropriate financial methodologies to evaluate potential real estate investment opportunities. (Quantitative Fluency)
3. Apply and analyze appropriate investment strategies to evaluate potential real estate investment opportunities. (Critical Thinking)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a certificate. Some courses are critical to complete in specific semesters while others may be moved around. Meeting with an academic advisor is essential in planning courses and discussing the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended certificate.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a certificate and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their certificate requirements (for one semester certificates complete in the first week of class):

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If your petition for graduation is denied, it will be your responsibility to apply for graduation in a subsequent semester. Your “Intent to Graduate” does not automatically move to a later graduation date.
INSTITUTIONAL CERTIFICATE REQUIREMENTS
The following institutional requirements apply to all CMU professional certificates. Specific programs may have different requirements that must be met in addition to institutional requirements.

- Consists of 5-59 semester hours.
- Primarily 300-400 level courses.
- At least fifty percent of the credit hours must be taken at CMU.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Certificate Requirements.
- The Catalog Year determines which program sheet and certificate requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC CERTIFICATE REQUIREMENTS
- 9 total semester hours for the Professional Certificate in Real Estate.

PROFESSIONAL CERTIFICATE: REAL ESTATE REQUIREMENTS (9 semester hours)

- REAL 350 - Real Estate Fundamentals (3)
- REAL 410 - Real Estate Finance and Development (3)
- REAL 415 - Real Estate Valuation and Investment (3)

SUGGESTED COURSE SEQUENCING

Junior Year, Fall Semester: 3 credits

- REAL 350 - Real Estate Fundamentals (3)

Junior Year, Spring Semester: 3 credits

- REAL 410 - Real Estate Finance and Development (3)

Senior Year, Fall Semester: 3 credits

- REAL 415 - Real Estate Valuation and Investment (3)
Course Additions

MATH 492
Credit Hours 3

Course Title: Senior Capstone
Abbreviated Title: Senior Capstone

Contact hours per week: Lecture 3 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 2250 Student preparation minutes: 4500

Intended semesters for offering this course: Fall ☑ J-Term ☐ Spring ☐ Summer ☐

Intended semester to offer course 1st time: Fall 2019

Number of times course may be taken for credit: 1

Essential Learning Course: Yes ☑ No ☐

EL SLO: NA

Prerequisites: Yes ☑ No ☐

Senior standing.

Prerequisite for other course(s): Yes ☑ No ☐

Co-requisites: Yes ☑ No ☐

Requirement or listed choice for any program of study: Yes ☑ No ☐

CSMS BS, Mathematics-Applied Mathematics: 3437
CSMS BS, Mathematics-Mathematics: 3424
CSMS BS, Mathematics-Secondary Education: 3430
CSMS BS, Mathematics-Statistics: 3434

Course is a requirement for a new program:

CSMS BS Mathematics-Actuarial Science

Overlapping content with present courses offered on campus: Yes ☑ No ☐

Some topics such as library use, presentation skills, etc. from MATH 484 (Senior Seminar) (2 credits) and MATH 494 (Senior Seminar) (2 credits) will be included in this course, MATH 492. However MATH 484 and MATH 494 will no longer be required or taught.

Additional faculty FTE required: Yes ☑ No ☐

Additional equipment required: Yes ☑ No ☐

Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:

Exploration and communication of mathematical ideas and problems relevant to individual mathematics concentrations by integrating and extending material covered in mathematics coursework. Investigations may also include placing mathematics in historical, applied, professional and social contexts.

Justification:

Students in all concentrations of mathematics (Mathematics, Applied Math, Secondary Education, Statistics, Actuarial Science) will enroll in the same MATH 492 (Senior Capstone course). The final project in the course will be tailored to the students' individual concentrations.

Our current senior capstone is a two-course sequence, MATH 484 (Senior Seminar) (2 credits) and MATH
Course Additions

494 (Senior Seminar) (2 credits). We identified the following issues with the sequence which initiated the creation of the new course MATH 492: Senior Capstone.

MATH 484/MATH 494:
- a) The year-long sequence (when taught once per year) presented a hurdle for graduating on time for those not on schedule.
- b) When both courses were offered every semester to address the above issue, low enrollment became an issue.
- c) The year-long sequence required each student to have faculty advisor. Faculty advisors met with students 1-3 hours per week. This is a heavy commitment for faculty, especially when the number of students out-numbered the faculty.

The new MATH 492 (Senior Capstone) course:
- a-b) The 3-credit course (taught in fall) will replace 8 credits of MATH 484/494 offered each year. This new format will allow all students (regardless of December or May graduation) to complete the course during their senior year. Having all seniors in one course rather than spread across two sections will increase the course enrollment, and replacing the MATH 484/MATH 494 sequence removes several (faculty) credits of possible low enrollment courses.
- c) MATH 492 will incorporate 2-3 mini projects (no advisor) and one 6-8 week substantial project in collaboration with a faculty advisor. Students still experience the one-on-one work with faculty while the commitment is more manageable for the faculty.

In addition, the variety of projects and presentations will better prepare our students for the workforce whereas the 1.5 semester long project in the current MATH 484/494 is more suitable for students planning to attend graduate school. For students interested in graduate school or simply interested in a semester-long research project, the option will still be available.

Topical course outline:
- reading, writing and presentations of mathematical content
- solving integrative problems across the math curriculum at least one of which will have a social justice theme
- significant project under the direction of a faculty mentor based on the student's concentration and interests
- careers in mathematics

Student Learning Outcomes:

Program SLOs:
* Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy)

* Demonstrate comprehension of an advanced topic in mathematics and deliver written and oral presentations. (Specialized Knowledge, Communication Fluency, Information Literacy)

Course SLOs:
1) Use mathematics to help investigate a problem that has a social/ethical theme and communicate the results. (Communication/Social Responsibility/Info Lit)

2) Conduct a substantive investigation of an advanced topic in the student's concentration area in mathematics and present the results. (Comprehension of Advanced Topic/Presentations)

Discussions with affected departments:

The Math Program Working Group met throughout Fall 2018 to discuss all math program changes. Changes presented to the CSMS Department at a Department meeting on 12/3/2018. Math Department Faculty vote on 1/30/2019: in favor.
Course Additions

Proposed by: Traci Friedman and Cathy Bonan-Hamad  Expected Implementation: Fall 2019
Course Deletions

MATH 415  
Credit Hours  3

Course Title: Abstract Algebra for Secondary Education

Essential Learning Course: Yes ☐ No ☑

Requirement or listed choice for any program of study: Yes ☑ No ☐

CSMS BS, Mathematics-Secondary Education: 3430

Prerequisite for other course(s): Yes ☐ No ☑

Co-requisite for other course(s): Yes ☐ No ☑

Justification:
This course deletion is part of a significant overhaul of the mathematics programs. MATH 415 (Abstract Algebra for Secondary Education) historically has low enrollment. On the program sheet, the option MATH 415 OR MATH 490 (Abstract Algebra I) was listed. MATH 490 will continue to be offered and will change from being offered every other year (Fall and Spring) to being offered every Spring.

Hence, MATH 415 can be deactivated and "MATH 415 OR MATH 490" can be replaced with MATH 490 on the Mathematics-Secondary Education program sheet.

Also note, the course on abstract algebra (MATH 490) will move from a required course to a list of choices for a restricted elective in the Mathematics-Secondary Education program.

Proposed by: Lisa Driskell  
Expected Implementation: Fall 2019
## Course Deletions

**MATH 425**  
**Credit Hours**  
3

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>Computational Abstract Algebra</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential Learning Course:</td>
<td>Yes ☐ No ☑</td>
</tr>
<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes ☐ No ☑</td>
</tr>
<tr>
<td>Prerequisite for other course(s):</td>
<td>Yes ☐ No ☑</td>
</tr>
<tr>
<td>Co-requisite for other course(s):</td>
<td>Yes ☐ No ☑</td>
</tr>
</tbody>
</table>

**Justification:**
Catalog cleanup.
This course has not been offered in over 15 years and it is not on any program sheets. With topics similar to those in MATH 490 (Abstract Algebra I) it seems best to remove this course from the catalog to reduce any possible confusion.

**Proposed by:** Lisa Driskell  
**Expected Implementation:** Fall 2019
Course Modifications

CSCI 112

Intended semester to offer modified course for the 1st time: Spring 2020

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<th>Current</th>
<th>Proposed</th>
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</thead>
<tbody>
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<tr>
<td>Course No.:</td>
<td>112</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>4</td>
</tr>
<tr>
<td>Course Title:</td>
<td>CS2: Data Structures</td>
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<tr>
<td>Times for Credit:</td>
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</tr>
<tr>
<td>Prerequisites:</td>
<td>Current: CSCI 111</td>
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<tr>
<td></td>
<td>Proposed: CSCI 111 OR CSCI 130</td>
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<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes ✓ No ☐</td>
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<tr>
<td>Change affects program sheet or grad requirements:</td>
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<tr>
<td>CSMS   BS,   Computer Science: 3420</td>
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</tr>
<tr>
<td>CSMS   AS,   Liberal Arts-Computer Science: 2421</td>
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</tr>
<tr>
<td>CSMS   Minor,   Computer Science: M450</td>
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</tr>
</tbody>
</table>

Justification:
CSCI 130 Introduction to Engineering Computer Science is offered mostly for Engineering programs, and has now been changed to teach C++. Some of these students will be required to take CSCI 112 CS2: Data Structures, which does not currently list CSCI 130 as a prerequisite. This change will reflect the updated course.

Topical course outline, current:
NA

Topical course outline, proposed:
NA

Student Learning Outcomes, current:
NA

Student Learning Outcomes, proposed:
NA

Essential Learning SLOs, proposed:
NA

Discussions with affected departments:
NA

Necessary change due to the modification of CSCI 130. CS faculty have discussed this change to CSCI 130 and the resulting necessary changes in Fall 2018.

Proposed by: Lori K. Payne
Expected Implementation: Fall 2019
## Course Modifications

**CSCI 130**

**Intended semester to offer modified course for the 1st time:** Fall 2019

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Proposed</th>
</tr>
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<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Course Title:</td>
<td>Introduction to Engineering Computer Science</td>
<td></td>
</tr>
<tr>
<td>Contact hours:</td>
<td>Lecture</td>
<td>Lecture 4</td>
</tr>
<tr>
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<td>Lab</td>
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<tr>
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<td>Instr. Activity:</td>
<td>Lecture/Laboratory</td>
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<tr>
<td>Prep Min.:</td>
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<td>6000</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Description for catalog:**

**Current:** Introduces the use of computers in engineering problem solving and elementary numerical methods. Learn programming fundamentals, including data and algorithm structure, and modular programming. Numerical methods learned include solving single, nonlinear equations, fixed-point iteration, Gaussian elimination, and linear regression.

**Proposed:** Introduction to fundamental programming concepts for engineers using a systems language and a scripting language. Programming concepts include flow control, data types and pointers. Applications include signal processing and numerical methods.

**Requirement or listed choice for any program of study:** Yes ☑ No ☐

**Change affects program sheet or grad requirements:** Yes ☑ No ☐

**Engineering BS, Mechanical Engineering Technology:** 3453
**Engineering AAS, Mechanical Engineering Technology:** 1453
**CSMS AS, Liberal Arts-Computer Science:** 2421
**CSMS Minor, Computer Science:** M450
**CSMS BS, Mathematics-Applied Mathematics:** 3437

**Course is a requirement for a new program:**

**Engineering BS Electrical and Computer Engineering**

**Justification:**

Required for introduction of Electrical and Computer Engineering (ECE) Degree, dictated by the CU partnership. The modification to the content of this course modernizes the content of our CSCI 130 class so that it is suitable for the new ECE major. In particular, the content must prepare students for CSCI 112 (CS2: Data Structures) and give them background for scripting tools such as MATLAB for engineering application.

The change to credit hours and instructional activity (to lecture) is because of the change in content. This will be the engineering version of CSCI 111: CS1 Foundations of Computer Science course, with the addition of a scripting language. CSCI 111 is a 4 credit hour course; since we are expecting the students in the proposed CSCI 130 course to be taking calculus (the co-requisite for CSCI 111 is College Algebra), the students as a group will be prepared to move more quickly though the material. This CSCI 130 class will do
**Course Modifications**

more, but we expect that transferring the understanding of one language to another will be manageable for freshman engineering students.

A very similar course offered in the school of engineering at UC Boulder (which this class is intended to replace for the Electrical & Computer Engineering students going through the partnership engineering degree) is listed as 4 credit hours.

**Topical course outline, current:**

- Built in Functions
- Matrices
- Plotting
- User defined Functions
- Matrix Algebra
- Excel
- Graphing in Excel
- Linear Regression
- Statistical Functions
- Solving Nonlinear Equations
- Numerical Techniques

**Topical course outline, proposed:**

- Integrated Development Environments
- Built-In Functions
- User Defined Functions
- Input/Output
- Conditions
- Repetition
- Strings & Arrays
- Repetition
- Pointers
- Generics
- Macros
- Modules
- Structures
- Arrays
- Scripting: Integrated Development Environments
- Concept Mapping

**Student Learning Outcomes, current:**

n/a these outcomes were not required when we first proposed this course

**Student Learning Outcomes, proposed:**

1) Define key concepts in Computer Science such as abstraction and top down programming
2) Use data types such as int, char, double, string, array and structs
3) Use basic control structures
4) Write an algorithm to solve a basic problem
5) Construct code for a program following a basic algorithm
6) Debug a program

**Essential Learning SLOs, proposed:**

n/a

**Discussions with affected departments:**
Course Modifications

Met with Engineering with Francisco Castro & Scott Bevill (September 2018) to implement required changes. Boulder has a C-based version but that is not sufficient for students taking our C++ based CS2 class, which Electrical & Computer Engineering BS majors will have to take.

Met with Phil Gustafson Applied Math (October 2018); realized the change improves (reduces) the total required number of classes in that degree program and ensures all students will have some exposure to an appropriate language for modeling in the upper division classes.

Proposed by: Warren MacEvoy

Expected Implementation: Fall 2019
Course Modifications

CSCI 310
Intended semester to offer modified course for the 1st time: Spring 2020

<table>
<thead>
<tr>
<th>Current</th>
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<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
<td>310</td>
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<tr>
<td>Credit Hours:</td>
<td>1-3</td>
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<tr>
<td>Course Title:</td>
<td>Advanced Programming</td>
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<tr>
<td>Times for Credit:</td>
<td>4</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>CSCI 111 or CSCI 110.</td>
</tr>
</tbody>
</table>

Proposed:

CSCI 111 or CSCI 110 or CSCI 130.

Requirement or listed choice for any program of study: Yes [✓] No [ ]
Change affects program sheet or grad requirements: Yes [✓] No [ ]

CSMS BS, Mathematics-Applied Mathematics: 3437
CSMS AS, Liberal Arts-Computer Science: 2421
CSMS Minor, Computer Science: M450
CSMS Prof Cert, Web Applications Development: 1540

Justification:
CSCI 130 Introduction to Engineering Computer Science is offered mostly for Engineering programs, and has now been changed to teach C++. With the modification to CSCI 130, the math programs have added CSCI 130 as an alternate option to the CSCI 111 or CSCI 110 requirement. Applied math students are also required to take CSCI 310 and so adding CSCI 130 as an alternate prerequisite will allow those students to enroll. The modified CSCI 130 sufficiently prepare students for CSCI 310.

Topical course outline, current:
NA
Topical course outline, proposed:
NA

Student Learning Outcomes, current:
NA
Student Learning Outcomes, proposed:
NA
Essential Learning SLOs, proposed:
NA
Discussions with affected departments:
Course Modifications

NA

Necessary change due to the modification of CSCI 130. CS faculty have discussed the change to CSCI 130 and the resulting necessary changes with each other and with mathematics faculty in Fall 2018.

Proposed by: Lisa Driskell

Expected Implementation: Fall 2019
Course Modifications

MATH 225

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
<th>Current</th>
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</thead>
<tbody>
<tr>
<td>Course Prefix:</td>
<td>MATH</td>
</tr>
<tr>
<td>Course No.:</td>
<td>225</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>2</td>
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<tr>
<td>Course Title:</td>
<td>Computational Linear Algebra</td>
</tr>
<tr>
<td>Contact hours:</td>
<td>Lecture  2</td>
</tr>
<tr>
<td></td>
<td>Lab</td>
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<td>Other</td>
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<tr>
<td>Engage Min.:</td>
<td>1500</td>
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<tr>
<td>Prep Min.:</td>
<td>3000</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
</tbody>
</table>

Current: A computational approach to matrices, determinates, systems of equations, vector spaces, linear transformations, eigenvectors and eigenvalues, as well as their applications. Computational methods will be used to explore and investigate the traditional subjects of linear algebra.

Proposed: Computational approach to systems of equations, vector spaces, matrices, matrix transformations, eigenvalues, as well as their applications. Software for linear algebra computations is introduced and utilized.

Requirement or listed choice for any program of study: Yes ☒ No ☐

Change affects program sheet or grad requirements: Yes ☒ No ☐

CSMS BS, Mathematics-Mathematics: 3424
CSMS BS, Mathematics-Secondary Education: 3430
CSMS BS, Mathematics-Statistics: 3434
CSMS Minor, Mathematics: M460

Course is a requirement for a new program:

CSMS BS Mathematics- Actuarial Science

Justification:

MATH 225 (Computational Linear Algebra) was added (reinstated) as a 2-credit course with the addition of our Applied Math concentration a few years ago. Changing this to a 3-credit course is part of a significant overhaul of the math programs.

Our 300-level Linear Algebra course (MATH 325: Linear Algebra) is a proof-based course with a prerequisite that is prohibitive for students in other STEM programs while MATH 225 services programs such as physics, engineering, and computer science (note: linear algebra is not required but is a valuable course for students in these programs). However, the addition of MATH 225 resulted in mathematics students taking 5 credits of Linear Algebra (MATH 225 and MATH 325). Math programs typically require either a 200-level or a 300-level course in linear algebra, but not both. To continue offering linear algebra in a format suitable for other programs, we have decided to require the 200-level Computational Linear Algebra for math students and not require the 300-level course. Hence MATH 225 must be increased to 3-credits for sufficient material to be covered.

Topical course outline, current:
Course Modifications

NA

Topical course outline, proposed:
- systems of linear equations
- row operations
- vector equations
- matrix equations
- linear independence
- subspaces of $\mathbb{R}^n$
- matrix/linear transformations
- matrix operations
- invertible matrix theorem
- determinants
- eigenvalues/eigenvectors
- characteristic equation
- applications

Student Learning Outcomes, current:

Program SLO: Construct multi-step problem-solving strategies and communicate solutions effectively in written form. (Specialized Knowledge, Quantitative Fluency)

Program SLO: Use mathematical software (including calculators) to aid in problem-solving and investigation, and understand its limitations. (Applied Learning)

Student Learning Outcomes, proposed:

Program SLO: Construct multi-step problem-solving strategies and communicate solutions effectively in written form. (Specialized Knowledge, Quantitative Fluency)

Program SLO: Use mathematical software (including calculators) to aid in problem-solving and investigation, and understand its limitations. (Applied Learning)

Course SLOs:

1) Solve and describe the solution set to a system of linear equations. (Multi-step strategies/Communication)
2) Translate a linear system to both a vector equation and matrix equation. (Multi-step strategies/Communication)
3) Test a set of vectors for linear dependence/independence. (Multi-step strategies/Communication)
4) Determine properties of a matrix transformation (e.g. one-to-one and onto). (Multi-step strategies/Communication)
5) Compute the determinant of a matrix. (Multi-step strategies/Communication)
6) Find all eigenvalues and associated eigenvectors for a square matrix. (Multi-step strategies/Communication)
7) Use linear algebra software to assist in these investigations and apply them to various contexts. (Software)

Essential Learning SLOs, proposed:

NA

Discussions with affected departments:

The Math Program Working Group met throughout Fall 2018 to discuss all math program changes. Changes presented to the CSMS Department at a Department meeting on 12/3/2018. Department vote on 1/30/2019: in favor.

Math Department Faculty vote: Physics, Engineering, and Computer Science departments were notified, however MATH 225 is not on any program sheets outside of mathematics.
Course Modifications

Proposed by: Eric Miles

Expected Implementation: Fall 2019
Course Modifications

MATH 325

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
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<tbody>
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<tr>
<td>Course No.:</td>
<td>325</td>
</tr>
<tr>
<td>Credit Hours:</td>
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<tr>
<td>Course Title:</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
</tbody>
</table>

Current: Matrices, solving systems of equations, determinants, vectors, vector spaces, linear transformations and eigenvalues.

Proposed: Proof-based treatment of linear algebra. Topics include vector spaces, linear transformations, eigenvalues, and orthogonality.

Requirement or listed choice for any program of study: Yes ☑ No ☐

Change affects program sheet or grad requirements: Yes ☑ No ☐

CSMS BS, Mathematics-Applied Mathematics: 3437
CSMS BS, Mathematics-Mathematics: 3424
CSMS BS, Mathematics-Secondary Education: 3430
CSMS BS, Mathematics-Statistics: 3434
CSMS Minor, Mathematics: M460

Justification:
The course description is being edited to clearly distinguish MATH 325 (Linear Algebra) from MATH 225 (Computational Linear Algebra).

With the increase from 2 credits to 3 credits for MATH 225, it is expected that material covered in MATH 325 can be extended which is reflected in the course description and the topical outline. The new topical outline requires a new set of course SLOs.

NOTE: The current course description listed in the catalog is from pre-Fall 2017. A course modification was submitted in Spring 2017 to change the course description to distinguish the course from the (at the time) new MATH 225 Computational Linear Algebra.

The intended course description (for Fall 2017 -present) is:

Proof-based treatment of vector spaces, linear transformations, bases, coordinate systems, eigenvalues, eigenspaces, diagonalization, as well as applications.

Topical course outline, current:

Pre Fall 2017:
Computational and proof methods covered.
- Matrices
- Vectors
- Solving systems of equations
- Gaussian elimination
- Determinants
- Vector spaces and subspaces
- Null space and column space
- Linear transformations
- Linear independence
Course Modifications
- bases
- spanning sets
- coordinate systems
- rank
- change of basis
- eigenvalues and eigenvectors

Fall 2017-present:
  Theory and proof emphasized.
  - vector spaces and subspaces
  - null space and column space, linear transformations
  - linear independence
  - bases
  - spanning sets
  - coordinate systems
  - rank
  - change of basis
  - eigenspaces
  - diagonalization
  - applications, and other advanced topics as time permits.

Topical course outline, proposed:
  Theory and proof emphasized.
  - vector spaces/subspaces
  - linear transformations
  - bases
  - coordinate systems
  - dimension
  - change of basis
  - eigenvalues/eigenvectors
  - characteristic equation
  - diagonalization
  - change of basis for linear transformations
  - inner (dot) product
  - orthogonal sets
  - orthogonal projections
  - Gram-Schmidt process
  - Inner Product Spaces
  - applications

Student Learning Outcomes, current:
1) Determine linear dependence or independence of a set of vectors
2) Show whether a subset of a vector space is a subspace.
3) Given two bases, find the change of basis matrix.
4) Find eigenspaces associated with eigenvectors.
5) Find diagonalization of a matrix.
6) Write complete proofs demonstrating validity of basic linear algebra results.

Student Learning Outcomes, proposed:
Program SLO: Construct multi-step problem-solving strategies and communicate solutions effectively in written form. (Specialized Knowledge, Quantitative Fluency)

Program SLO: Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking)
Course Modifications

Course SLOs:
1) Determine if a subset of a vector space is a subspace. (Prove propositions)
2) Determine if a function is a linear transformation. (Prove propositions)
3) Construct a basis for a subspace. (Prove propositions)
4) Execute a change of coordinates on a vector space. (Multi-step strategies/Communication)
5) Describe a linear transformation as a matrix transformation and execute a change of basis. (Multi-step strategies/Communication)
6) Construct an orthonormal basis for a subspace. (Multi-step strategies/Communication)
7) Prove properties of general inner products and inner product spaces. (Prove propositions)

Essential Learning SLOs, proposed:
NA

Discussions with affected departments:
The Math Program Working Group met throughout Fall 2018 to discuss all math program changes. Changes presented to the CSMS Department at a Department meeting on 12/3/2018.

Proposed by: Eric Miles  Expected Implementation: Fall 2019
Course Modifications

MATH 352

Intended semester to offer modified course for the 1st time: Spring 2020

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<tbody>
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<tr>
<td>Course No.:</td>
<td>352</td>
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<tr>
<td>Credit Hours:</td>
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<tr>
<td>Course Title:</td>
<td>Advanced Calculus</td>
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<tr>
<td>Times for Credit:</td>
<td>1</td>
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</tbody>
</table>

Description for catalog:

Current: A rigorous and thorough treatment of differential and integral Calculus of one real variable. Topics include construction of the real numbers, limits, continuity, derivatives, integration, and series.

Proposed: Proof-based treatment of calculus of one real variable with focus on axiomatic development. Topics include completeness of the real numbers, limits, continuity, derivatives, integrals, and the Fundamental Theorem of Calculus.

Requirement or listed choice for any program of study: Yes ☑ No □

Change affects program sheet or grad requirements: Yes ☑ No □

CSMS BS, Mathematics-Applied Mathematics: 3437
CSMS BS, Mathematics-Mathematics: 3424
CSMS BS, Mathematics-Secondary Education: 3430
CSMS Minor, Mathematics: M460

Justification:

This modification is part of a significant overhaul of the mathematics programs.

The previous list of topics in the course description was ambitious and "series" is not covered in the course but will be covered in MATH 452 (Real Analysis I). MATH 352 (Advanced Calculus) will become a new prerequisite for MATH 452 (Real Analysis I) and thus a course modification for MATH 452 is also submitted with new course description to eliminate overlap in content with MATH 352.

Currently, MATH 352 (Advanced Calculus) is required for Mathematics-Secondary Education but cannot be used on the Mathematics-Mathematics program sheet due to overlap in content with the required MATH 452 (Real Analysis I). With the pending program modifications, MATH 352 will be a prerequisite for MATH 452 and both courses will required for the Mathematics-Mathematics degree. Hence, the course description and topical outline must be modified to clearly specify topics and reduce possible overlap with MATH 452.

Topical course outline, proposed:

- Development of the real numbers from axiomatic approach
- Formal definition of limits of functions of a single variable
- Formal definition of continuity
- Intermediate Value Theorem
- Extreme Value Theorem
- Formal development of derivatives
- Mean Value Theorem
- Development of the Riemann integral
- The Fundamental Theorem of Calculus

Student Learning Outcomes, current:

Construct multi-step problem-solving strategies and communicate solutions effectively in written form.
(Specialized Knowledge, Quantitative Fluency)
**Course Modifications**

Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking)

**Student Learning Outcomes, proposed:**

**Program SLOs**
Construct multi-step problem-solving strategies and communicate solutions effectively in written form. (Specialized Knowledge, Quantitative Fluency)
Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking)

**Course SLOs:**
1. Choose appropriate technique to calculate limits (Multi-step strategies/Communication)
2. Use the limit definition to determine the derivative of a function (Multi-step strategies/Communication)
3. Use the epsilon-delta definitions to formally establish limits and continuity of simple functions (such as linear, quadratic, square root and reciprocal functions) and describe the results (Multi-step strategies/Communication)
4. Construct proofs that utilize key theorems and definitions in Advanced Calculus (Prove propositions)

**Essential Learning SLOs, proposed:**

**NA**

**Discussions with affected departments:**

The Math Program Working Group met throughout Fall 2018 to discuss all math program changes.
Changes presented to the CSMS Department at a Department meeting on 12/3/2018.
Math Department Faculty vote on 1/30/2019: in favor.

**Proposed by:** Cathy Bonan-Hamada  
**Expected Implementation:** Fall 2019
## Course Modifications

**MATH 420**

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<tr>
<td>Course No.:</td>
<td>420</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Course Title:</td>
<td>Introduction to Topology</td>
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<td>Times for Credit:</td>
<td>1</td>
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<tr>
<td>Prerequisites:</td>
<td></td>
</tr>
<tr>
<td>Current: MATH 325 or permission of instructor.</td>
<td>Proposed: MATH 310 or MATH 325 or MATH 352</td>
</tr>
</tbody>
</table>

**Description for catalog:**

Current: Important as preparation for graduate work in many areas of mathematics and theoretical physics. Introduction to general topology, topics normally covered include: metric spaces, connectedness, compactness, the separation axioms and the Tychonoff theorem. Intended for mathematically mature students.

Proposed: Introduction to point set topology. Topics include topological spaces, metric spaces, connectedness, compactness, the separation axioms, and the Tychonoff theorem.

**Requirement or listed choice for any program of study:**

- Yes ☑️ No ☐

**Change affects program sheet or grad requirements:**

- Yes ☑️ No ☐

**CSMS BS, Mathematics-Mathematics:** 3424

**CSMS BS, Mathematics-Secondary Education:** 3430

**CSMS Minor, Mathematics:** M460

**Justification:**

Prerequisite:

MATH 325 (Linear Algebra) is no longer a required course in the math program whereas MATH 310 (Number Theory) and MATH 352 (Advanced Calculus) are required. The MATH 325 prerequisite was a mathematical maturity and proof-writing experience requirement and both MATH 310 and MATH 352 also fulfill these requirements and so they are being added to the options of prerequisite courses. "Or permission of instructor is implied."

**Course Description:** Description is being modified to fit the UCC manual rules for course descriptions. Course content is not being altered.

**Topical course outline, current:**

NA

**Student Learning Outcomes, current:**

NA

**Topical course outline, proposed:**

NA

**Student Learning Outcomes, proposed:**

NA

**Essential Learning SLOs, proposed:**

NA

**Discussions with affected departments:**

NA
### Course Modifications

Math Tenure/Tenure-Track faculty vote on 1/30/2019: in favor

| Proposed by       | Markus Reitenbach | Expected Implementation: | Fall 2019 |
Course Modifications

MATH 452

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
<th>Current</th>
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</thead>
<tbody>
<tr>
<td>Course Prefix:</td>
<td>MATH</td>
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<tr>
<td>Course No.:</td>
<td>452</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Course Title:</td>
<td>Introduction to Real Analysis I</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>Current: MATH 240, 253, and a grade of C or better in one of the following: MATH 310, MATH 325, or MATH 352.</td>
</tr>
</tbody>
</table>

Description for catalog:

Current: An in-depth and rigorous treatment of the theory of calculus, with an introduction to real analysis. Topics for MATH 452 and MATH 453 include number systems, cardinality, point set topology; open and closed sets, metric spaces, completeness, compactness and connected sets; sequences, series, limits, continuity, differentiation, integration, sequences and series of functions, and Euclidean spaces

Proposed: Introduction to real analysis from a general metric space perspective. Topics may include point set topology, completeness, compactness and connected sets, sequences, series, continuity, integration and sequences and series of functions.

Requirement or listed choice for any program of study: Yes ☑️ No ☐

Change affects program sheet or grad requirements: Yes ☐ No ☑

CSMS BS, Mathematics-Applied Mathematics: 3437
CSMS BS, Mathematics-Mathematics: 3424
CSMS Minor, Mathematics: M460

Justification:

Prerequisites:
MATH 240 (Introduction to Advanced Mathematics) is a prerequisite for the other (300-level) courses currently listed in the prerequisites for MATH 452 (Introduction to Real Analysis I) so MATH 240 is being removed from the list. Also, "a grade of C or better" is required for all mathematics prerequisites and does not need to be specifically stated.

The current choice list of MATH 325 (Linear Algebra), MATH 310 (Number Theory), or MATH 352 (Advanced Calculus) is for mathematical maturity and proof-writing experience rather than mathematical content. We are modifying MATH 352 and MATH 452 to create a two-course sequence (MATH 352-MATH 452) with MATH 352 as the prerequisite for its content as well as the mathematical maturity. Streamlining the prerequisite will also facilitate the formation of student cohorts.

Course Description and Topical Outline:
Currently, MATH 352 (Advanced Calculus) is required for Mathematics-Secondary Education but cannot be used on the Mathematics-Mathematics program sheet due to overlap in content with the required MATH 452 (Intro to Real Analysis I). With the pending program modifications, MATH 352 will be a prerequisite for MATH 452 and both courses will required for the Mathematics-Mathematics degree. Hence, the course description and topical outline of MATH 452 must be modified to clearly specify topics and mathematical approaches to reduce possible overlap with MATH 352.

Teaching MATH 452 from a general metric space perspective will help prepare students for graduate school
**Course Modifications**

while having the MATH 352 prerequisite will ensure students are prepared to take on the abstract concepts of MATH 452.

**Topical course outline, current:**
- number systems
- cardinality
- point set topology
- open and closed sets
- metric spaces
- completeness
- compactness and connected set
- sequences
- series
- limits
- continuity
- differentiation
- integration
- sequences and series of functions
- Euclidean spaces

**Topical course outline, proposed:**
- metric spaces
- Euclidean metric on R^n
- topology on metric spaces
- sequences and limit points
- uniform continuity
- completeness
- compactness
- connectedness
- further development of the Riemann integral
- sequences and series of function

**Student Learning Outcomes, current:**
Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking)

**Student Learning Outcomes, proposed:**
Progran SLO: Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking)

**Course SLOs:**
- Construct proofs that utilize key theorems and definitions in Real Analysis I (Prove propositions)

**Essential Learning SLOs, proposed:**
NA

**Discussions with affected departments:**
The Math Program Working Group met throughout Fall 2018 to discuss all math program changes. Changes presented to the CSMS Department at a Department meeting on 12/3/2018. Math Department Faculty vote on 1/30/2019: in favor.

**Proposed by:** Tracii Friedman **Expected Implementation:** Fall 2019
Course Modifications

MATH 453

Intended semester to offer modified course for the 1st time: Spring 2020

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
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<tbody>
<tr>
<td>Course Prefix:</td>
<td>MATH</td>
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<tr>
<td>Course No.:</td>
<td>453</td>
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<tr>
<td>Credit Hours:</td>
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<tr>
<td>Course Title:</td>
<td>Introduction to Real Analysis II</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
</tbody>
</table>

Description for catalog:

Current: A continuation of MATH 452. Topics include number systems, cardinality, point set topology; open and closed sets, metric spaces, completeness, compactness and connected sets; sequences, series, limits, continuity, differentiation, integration; sequences and series of functions, and Euclidean spaces.

Proposed: Selected topics in advanced real analysis chosen by instructor.

Requirement or listed choice for any program of study: Yes [x] No [ ]
Change affects program sheet or grad requirements: Yes [ ] No [x]

CSMS BS, Mathematics-Mathematics: 3424
CSMS Minor, Mathematics: M460

Justification:

MATH 453 (Introduction to Real Analysis II) will no longer be required for majors and will be offered on demand when there is a cohort of students planning to attend graduate school. With the new description for MATH 452 (Intro to Real Analysis I) that specifies a general metric space approach to the material, MATH 453 will be a continuation of MATH 452 with topics that can be customized for the cohort of students.

Topical course outline, current:

NA

Topical course outline, proposed:

NA

Student Learning Outcomes, current:

Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking)

Student Learning Outcomes, proposed:

Program SLO: Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking)

Course SLO:
- Construct proofs that utilize key theorems and definitions in Real Analysis II (Prove propositions)

Essential Learning SLOs, proposed:

NA

Discussions with affected departments:

Math Department vote on 1/30/2019: in favor.

Proposed by: Cathy Bonan-Hamada
Expected Implementation: Fall 2019
Course Modifications

MATH 490

Intended semester to offer modified course for the 1st time: Spring 2020

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Prefix:</td>
<td>MATH</td>
</tr>
<tr>
<td>Course No.:</td>
<td>490</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Course Title:</td>
<td>Abstract Algebra I</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>Current: MATH 240, and a grade of C or better in one of the following: MATH 310, MATH 325, or MATH 352. Proposed: MATH 310</td>
</tr>
</tbody>
</table>

Description for catalog:

Current: An introduction to the theory of algebraic structures. Topics include groups, subgroups, cyclic groups, groups of permutations, homomorphisms, isomorphisms, the order of group elements, cosets, quotient structures, isomorphism theorems and an introduction to rings and fields.

Proposed: Introduction to the theory of algebraic structures. Topics include groups, subgroups, cyclic groups, groups of permutations, homomorphisms, isomorphisms, the order of group elements, cosets, quotient structures, isomorphism theorems and an introduction to rings and fields.

Requirement or listed choice for any program of study: Yes ☑ No ☐

Change affects program sheet or grad requirements: Yes ☑ No ☐

CSMS BS, Mathematics-Mathematics: 3424
CSMS BS, Mathematics-Secondary Education: 3430
CSMS Minor, Mathematics: M460

Justification:

Prerequisites:
MATH 240 (Introduction to Advanced Mathematics) is a prerequisite for the other (300-level) courses currently listed in the prerequisites for MATH 490 (Abstract Algebra I) so MATH 240 is being removed from the list. Also, "a grade of C or better" is required for all mathematics prerequisites an does not need to be specifically stated.

The current choice list of MATH 325 (Linat Algebra), MATH 310 (Number Theory), or MATH 352 (Advanced Calculus) is for mathematical maturity and proof-writing experience rather than mathematical content. We are modifying our program and creating a two-course sequence (MATH 310-MATH 490) with MATH 310 as the prerequisite for its concepts as well as the mathematical maturity. Streamlining the prerequisite will also facilitate the formation of student cohorts.

Course Description: clean up: removing the first word so that the description begins with the noun phrase "Introduction to..."

Topical course outline, current:
NA
Topical course outline, proposed:
NA
Student Learning Outcomes, current:
NA
Course Modifications

Student Learning Outcomes, proposed:
NA

Essential Learning SLOS, proposed:
NA

Discussions with affected departments:
The Math Program Working Group met throughout Fall 2018 to discuss all math program changes.
Changes presented to the CSMS Department at a Department meeting on 12/3/2018.
Math Department Faculty vote on 1/30/2019: in favor.

Proposed by: Lisa Driskell                         Expected Implementation: Fall 2019
Program Modification

Mathematics-Mathematics: 3424

Degree Type: BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:
The Mathematics program is undergoing significant modifications to address several issues.

Note, some modifications were approved by the Undergraduate Curriculum Committee on 10/25/2018. They are listed below, but will not be addressed in the justification.

PRIOR APPROVAL:
* Move MATH 240 (Introduction to Advanced Mathematics) from Core to Concentration Courses.
* Move one: CSCI 110/110L or CSCI 111 from Concentration to Core Courses.
* Replace STAT 311 (Statistical Methods) with STAT 301 (Computational Statistics) in the list of restricted electives.
* Spell out “Mathematics” in MATH 150 (Topics and Careers in Math) course title
* Other modifications in Oct 2018 are not needed as the new modifications (below) address the same courses.

NEW modifications

Summary
The major (academic) modifications are:
(A) Replace the two-semester Seminar Seminar sequence (MATH 484-MATH 494) with one Senior Capstone (MATH 492) course.
(B) Eliminate the required 400-level course option: MATH 453 (Intro Real Analysis II) or MATH 491 (Abstract Algebra II) which created a two-course depth sequence. Instead require two two-course sequences that are 300-400 level instead of both 400-level (MATH 310-MATH 490 and MATH 352-MATH 452). Also, require one of the restricted electives to be a 400-level course.
(C) Increase MATH 225 from 2 to 3 credits and remove MATH 325 as a required course.

List of modifications as seen on the Program Sheet:
1) Increase the credits for MATH 225 (Computational Linear Algebra) from 2 to 3.
2) Add MATH 492 (Senior Capstone)(3 credits) to the Core Courses.
3) Add CSCI 130 (Introduction to Engineering Computer Science)(4 credits) to the list of intro CSCI courses in the Core Courses and remove CSCI 130 from the required concentration courses.
4) Remove MATH 484 (Senior Seminar I) and MATH 494 (Senior Seminar II) from the program (replaced with MATH 492)
5) Remove MATH 325 (Linear Algebra) from required courses and add to list of restricted electives.
6) Add MATH 310 (Number Theory) and MATH 352 (Advanced Calculus) to required concentration courses and remove MATH 310 from list of restricted electives.
7) Remove required concentration course of "MATH 453 (Intro to Real Analysis II) OR MATH 491 (Abstract Algebra II)" List both separately in the restricted electives list.
8) Require at least one restricted elective to be 400-level.

Course sequencing:
9) List MATH 225 (Computational Linear Algebra) as a Spring course and MATH 492 (Senior Capstone) as a fall course in the course sequencing.
10) Add MATH 310 (fall-only), MATH 352 (spring-only) to course sequence and remove MATH 453/MATH
Program Modification

491.

SLOs:
11) New SLO: Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy)
12) Edited the last SLO.

Justification:

Overall Summary:
The mathematics degree is being modified to update and manage our program; better aligning our courses to create something that can better meet the needs of our students and fit the faculty resources, etc. In addition we aimed to address issues of low enrollment courses, prerequisites and course offerings creating difficulty meeting program requirements, and demands on faculty resources.

Justifications of the major (academic) modifications:
(A) Replace the two-semester Seminar Seminar sequence (MATH 484-MATH 494) with one Senior Capstone (MATH 492) course.
Justification: A subcommittee of the Math Program Working Group reviewed the structure of Capstone courses taught at various universities across country. Our current structure (two 2-credit courses) caused issues with students graduating on time which led to the courses being offered more often with low enrollment. Faculty worked one-on-one with students on a substantive (research) project and the course was suitable for just two of the five concentrations in math. The new course will be inclusive and required of students in all concentrations of math. The course will have a sequence of projects (rather than one main project) giving students experience studying math in a general or public context as well as working on a project in an advanced area of math. Students will also benefit from presentations to both general and expert audiences, better preparing our students for the workforce.

(B) Eliminate the required 400-level course option: MATH 453 (Intro Real Analysis II) or MATH 491 (Abstract Algebra II) which created a two-course depth sequence. Instead require two two-course sequences that are 300-400 level instead of both 400-level (MATH 310-MATH 490 and MATH 352-MATH 452). Also, require one of the restricted electives to be a 400-level course.
Justification: The Math Program Working Group examined math programs at schools of different sizes, types, prestige, etc. and noted that requiring a two-course 400-level sequence in Abstract Algebra or Real Analysis is no longer standard. Historically, this sequence was common in mathematics programs but most programs we have considered have moved away from the requirement as industry demands change and new areas of math surface. This requirement posed issues for our students graduating on time due to the schedule of course offerings. With a desire to still have depth in the two main branches of pure math: Abstract Algebra and Real Analysis, we decided to require MATH 310 as a prerequisite to MATH 490 and require MATH 352 as a prerequisite to MATH 452 creating two 300 to 400 level course sequences. Course modifications for MATH 352 and MATH 452 are required to reduce overlap. Specifying these prerequisites and offering the 400-level courses MATH 452 and MATH 490 once per year (rather than every other year) will help to build cohorts of students in the math program and will eliminate the graduation difficulties that are due to scheduling issues. To keep the same number of 400-level courses, we will now require one of the restricted electives to be at the 400-level.

(C) Increase MATH 225 from 2 to 3 credits and remove MATH 325 as a required courses.
Three credits of Linear Algebra is standard for BS programs in mathematics. Previously, 5 credits of linear algebra were required whereas typical math programs require only three credits, either at the 200-level or 300-level, but not both. This opens up the program to allow a more diverse set of course topics.

Itemized Justifications related to the Program Sheet changes:

1) Increase in credits for MATH 225 reflects the current course mod aimed at improving the various program concentrations of Mathematics.
Program Modification

2) & 4) Read justification for (A) above.
3) CSCI 130 is being modified at the request of Engineering. The modified course is a suitable (and possibly favorable) alternative to the other introductory computer science courses and thus will be added to the "choose one" list. It will no longer be appropriate for students to take both CSCI 111 and CSCI 130, so moving CSCI 130 from a required course to an option with CSCI 111 or CSCI 110 reduces the credits/required courses for the degree.

5) Three credits of Linear Algebra is standard for BS programs in mathematics. With the increase in credits of MATH 225 (Computational Linear Algebra) from 2 to 3, we are able to remove MATH 325 (Linear Algebra) from the required course list. Also, read the justification for (C) above.
6,7,8) Read justification for (B) above.

Course sequencing:
9) Students will be encouraged to take MATH 225 in the spring of their sophomore year to reduce the heavy load of math courses in the fall of the sophomore year. MATH 492 will only be offered in the fall.
10) Offering the four courses, MATH 310 (fall), MATH 352 (spring), MATH 452 (fall), and MATH 490 (spring) once each per year will allow flexibility for students who are off schedule and should raise enrollment in the courses.

SLOs:
11) The new SLO was created to address the new Personal and Social Responsibility university SLO. The SLO will be addressed and assessed in MATH 492 through project(s) and presentation(s).
12) The last SLO was modified so the language will be similar for the corresponding SLO in the other concentrations.

Revision to SLOs: Yes ☑ No ☐

One additional SLO:
SLO: Investigate, discuss, and respond to ethical and social challenges in a mathematical context.
Linkage: (Communication Fluency, Personal and Social Responsibility, Information Literacy)
Map: Addressed in MATH 492; Senior Capstone.
Assessment of SLO: This SLO will be assessed in MATH 492: Senior Capstone through a project and presentation to a general, non-math audience.

New Curriculum Map: [Numbers are the SLO numbers, and are not referencing the items 1-4 listed above] SLO (mapping to university SLO). [Courses identified for program assessment.]

(1) Construct multi-step problem-solving strategies and communicate solutions effectively in written form. (Specialized Knowledge, Quantitative Fluency) [MATH 253 (Calculus III), MATH 225 (Computational Linear Algebra)]
(2) Use mathematical software (including calculators) to aid in problem-solving and investigation, and understand its limitations. (Applied Learning) [MATH 225 (Computational Linear Algebra)]
(3) Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking) [MATH 240 (Intro to Advanced Math), MATH 352 (Advanced Calculus), MATH 452 (Intro to Real Analysis I)]
(4) Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy) [MATH 492 (Senior Capstone)]
(5) Demonstrate comprehension of an advanced topic in mathematics and deliver written and oral presentations. (Specialized Knowledge, Communication Fluency, Information Literacy) [MATH 492 (Senior Capstone)]
Program Modification

Assessments will be through homework problems, projects, presentations, portfolios, and common exam questions and will be scored using common rubrics.

Other changes: Yes ☑️ No ☐

Program Goals and Strengths - The overarching goals of the program have not changed, although we believe the modifications will help us to better address them.

In particular, the adjustment to the required math (content courses) will allow students more flexibility to take courses related to their future plans (graduate school vs industry). We now offer several courses that were not offered when the degree was established such as Methods of Applied Math II, Cryptography, and Fourier Analysis. These courses allow students to gain a broader skillset which will better prepare them in today's market. Students planning to attend graduate school will still be encouraged to take the upper division courses Abstract Algebra II and Intro to Real Analysis II.

The new Senior Capstone course that is to replace the Senior Seminar sequence will allow for individualized final projects that will coincide with the students' intended path (graduate school vs. industry). All course projects, including those preceding the final project, will address and enhance the communication skills of the students. Students will be required to deliver technical information to both general and expert audiences, in both written and oral form. Previously, students were required only to address expert audiences. The projects are intended to stretch the students and their knowledge of social justice, historical perspectives, etc. in the context of mathematics (addressing the new Social and Personal Responsibility SLO), again, better preparing them for future endeavors of all types.

The rearrangement of course offerings and prerequisites is intended to create cohorts among the math majors and which will facilitate a sense of community and support. This step builds on the retention efforts that began with the creation of a first year seminar course.

Discussions with affected departments:
The Math Program Working Group met throughout Fall 2018 to discuss all math program changes.
Changes presented to the CSMS Department at a Department meeting on 12/3/2018.
Math Department Faculty vote on 1/30/2019: in favor.

Proposed by: Lisa Driskell

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Major . . .
Mathematics majors get jobs in a wide variety of areas. Our graduates have worked for local businesses, have run their own businesses and have worked for scientific companies. Other graduates have continued their educations by attending graduate school (in mathematics, computer science and engineering), law school, medical school and veterinary school.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html and/or http://www.coloradomesa.edu/mathstat/links.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will:

1. Construct multi-step problem-solving strategies, and communicate solutions effectively in written form. (Specialized Knowledge, Quantitative Fluency)
2. Use mathematical software (including calculators) to aid in problem-solving and investigation, and understand its limitations. (Applied Learning)
3. Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking)
3.4. Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy)
4. Learn an area of mathematics deeply and deliver substantial Demonstrate comprehension of an advanced topic in mathematics and deliver written and oral presentations of this area. (Specialized Knowledge, Communication Fluency, Information Literacy)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS
- 2.50 cumulative GPA or higher in coursework toward the major content area.
- At most one “D” may be used in completing major requirements.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)  
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)  
☐ ENGL 111 - English Composition (3)  
☐ ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)  
☐ MATH 151 - Calculus I (5)*  
*3 credits apply to the Essential Learning requirements and 2 credits apply to electives.

**Humanities** (3 semester hours)  
☐ Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)  
☐ Select one Social and Behavioral Sciences course (3)  
☐ Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)  
☐ Select one Natural Sciences course (3)  
☐ Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)  
☐ Select one History course (3)

**Fine Arts** (3 semester hours)  
☐ Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)  
☐ KINE 100 - Health and Wellness (1)  
☐ Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)  
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.  
☐ ESSL 290 - Maverick Milestone (3)  
☐ ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (8 semester hours)  
☐ MATH 152 - Calculus II (5)  
☐ STAT 200 - Probability and Statistics (3)
BS, MATHEMATICS REQUIREMENTS (43-46 semester hours. A 2.5 GPA is required in the major courses. At most one “D” may be used in completing major requirements.)

Core Courses (158 semester hours)
- MATH 150 - Topics and Careers in Mathematics (1)
- MATH 225 - Computational Linear Algebra (3)(2)
- MATH 240 - Intro to Advanced Mathematics (4)
- MATH 253 - Calculus III (4)
- MATH 325 - Linear Algebra (3)
- MATH 484 - Senior Seminar I (2)
- MATH 494 - Senior Seminar II (2)
- MATH 492 - Senior Capstone (3)
- One of the following courses:
  - CSCI 110 - Beginning Programming (3) with CSCI 110L - Beginning Programming Laboratory (1)
  - CSCI 111 - CS1: Foundations of Computer Science (4)
  - CSCI 130 – Introduction to Engineering Computer Science (4)

Required Concentration Courses (163 semester hours)
- CSCI 111 - Computer Science 1: Foundations (4)
- MATH 240 - Intro to Advanced Mathematics (4)
- MATH 310 - Number Theory (3)
- MATH 352 – Advanced Calculus (3)
- MATH 452 - Introduction to Real Analysis I (3)
- MATH 490 - Abstract Algebra I (3)
- One of the following courses:
  - MATH 453 - Introduction to Real Analysis II (3)
  - MATH 491 – Abstract Algebra II (3)

Restricted Concentration Electives (12-15 semester hours)
Select four courses from the following list. At least one course must be at the 400-level. At most one topics course, which must be 3 semester hours, can be used as one of these four courses.
- MATH 260 - Differential Equations (3) or MATH 236 - Differential Equations & Linear Algebra (4)
- MATH 310 - Number Theory (3)
- MATH 325 - Linear Algebra (3)
- MATH 360 - Methods of Applied Mathematics (3)
- MATH 361 - Numerical Analysis (4)
- MATH 362 - Fourier Analysis (3)
- MATH 365 - Mathematical Modeling (3)
- MATH 366 - Methods of Applied Mathematics II (3)
- MATH 369 - Discrete Structures I (3)
- MATH 370 - Discrete Structures II (3)
- MATH 386 - Geometries (4)
- MATH 420 - Introduction to Topology (3)
- MATH 430 - Mathematical Logic (3)
- MATH 450 - Complex Variables (3)
- MATH 460 - Advanced Linear Algebra (3)
- MATH 453 - Introduction to Real Analysis II (3) or MATH 491 – Abstract Algebra II (3)
- MATH 466 - Methods of Applied Mathematics III (3)
- MATH 491 – Abstract Algebra II (3)
- MATH 396 - Topics (1-3) or MATH 496 - Topics (1-3)
- STAT 3011 – Computational Statistical Methods (3)

**GENERAL ELECTIVES** (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 29-32 semester hours; 10-15/13 hours of upper division may be needed.)

- MATH 151 - Calculus I (2)
- ________________________________
- ________________________________
- ________________________________
- ________________________________
- ________________________________
- ________________________________
- ________________________________
- ________________________________
- ________________________________
- ________________________________
- ________________________________
## SUGGESTED COURSE SEQUENCING

### Freshman Year, Fall Semester: 16 credits
- MATH 151 - Calculus I (5)
- ENGL 111 - English Composition (3)
- KINA Activity (1)
- KINE 100 - Health and Wellness (1)
- Essential Learning - Natural Science (3)
- Essential Learning - Social and Behavioral Sciences (3)

### Freshman Year, Spring Semester: 16 credits
- MATH 152 - Calculus II (5)
- MATH 150 - Topics and Careers in Mathematics (1)
- ENGL 112 - English Composition (3)
- CSCI 111 - Computer Science 1: Foundations (4) or CSCI 110/CSCI 110L - Beginning Programming and Laboratory (4) or CSCI 130 – Introduction to Engineering Computer Science (4)
- Essential Learning - Social and Behavioral Sciences (3)

### Sophomore Year, Fall Semester: 176 credits
- MATH 225 - Computational Linear Algebra (2)
- MATH 240 - Intro to Advanced Mathematics (4)
- MATH 253 - Calculus III (4)
- STAT 200 - Probability and Statistics (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - History (3)

### Sophomore Year, Spring Semester: 16 credits
- MATH 225 - Computational Linear Algebra (3)
- MATH 325 - Linear Algebra (3)
- MATH 352 – Advanced Calculus (3)
- Restricted Elective (3)
- Essential Learning - Natural Science with Lab (4)
- Essential Learning - Humanities (3)
- Restricted General Elective (3)

### Junior Year, Fall Semester: 16 credits
- MATH 310 – Number Theory (3)
- MATH 452 - Introduction to Real Analysis I (3) or MATH 490 – Abstract Algebra I (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- General Electives (3 courses) (9)

### Junior Year, Spring Semester: 15-16 credits
- MATH 490 – Abstract Algebra (3)
- MATH 453 – Introduction to Real Analysis II (3) or MATH 491 – Abstract Algebra II (3)
- Restricted Concentration Elective - 400-level (3-4)
- General Electives (3 courses) (9)

### Senior Year, Fall Semester: 14-12-134 credits
- MATH 452 – Introduction to Real Analysis I (3) or MATH 490 – Abstract Algebra I (3)
- MATH 484 – Senior Seminar I (2)
- MATH 492 – Senior Capstone (3)
- Restricted Concentration Elective - 400-level (3-4)
- Concentration Elective (3-4)
- General Electives (12 courses) (36)
### Senior Year, Spring Semester: 11-10-12 credits

- MATH 494 - Senior Seminar II (2)
- General Electives (2 courses) (6)
- Restricted Concentration Elective (3-4)
- General Electives (2 courses) (6-9)
**Program Modification**

**Mathematics-Actuarial Science (New Program)**

Degree Type:  BS

Revision to program sheet:  Yes ☑  No ☐

Description of modification:  
Program: Mathematics - Actuarial Science

Note: This new program was approved by the Undergraduate Curriculum Committee on 10/25/2018. The program modifications listed here are due to course changes within other programs.

0) Add CISB 241 (Intro to Business Analysis) as an alternative to the equivalent course STAT 241 (Intro to Business Analysis) in the foundation courses. This was an oversight during the initial program addition in October 2018 which was caught at the UCC meeting and noted in the minutes as an amendment to the proposal.

1) Increase the credits for MATH 225 (Computational Linear Algebra) from 2 to 3.
2) Add MATH 492 (Senior Capstone) (3 credits) to the Core Courses.
3) Add CSCI 130 (Introduction to Engineering Computer Science) (4 credits) to the list of intro CSCI courses in the Core Courses.
4) Remove STAT 460 (Actuarial Exams Preparation) (3 credits) from the program (replaced with MATH 492)
5) List MATH 225 (Computational Linear Algebra) as a Spring course and MATH 492 (Senior Capstone) as a fall course in the course sequencing.
6) New SLO: Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy)

Justification:

0) Previous edit made to the program addition during the October UCC committee meeting before the program was approved.

These modifications are part of a significant overhaul of the mathematics programs.

1) Increase in credits for MATH 225 reflects the current course mod aimed at improving the various program concentrations of Mathematics.
2) & 4) STAT 460 was created because the current Senior Seminar structure for Mathematics was not suitable for students in Actuarial Science. With the overhaul to mathematics, the Senior Seminar sequence (MATH 484, MATH 494) is being replaced with one course, MATH 492 (Senior Capstone) which will be suitable for students in all concentrations of mathematics. In particular, Actuarial Science students will prepare for the actuarial exams as part of their final project for the course, thus eliminating the need for the course STAT 460 (Actuarial Exams Preparation).
3) CSCI 130 is being modified at the request of Engineering. The modified course is a suitable (and possibly favorable) alternative to the other introductory computer science courses and thus will be added to the "choose one" list.
5) Students will be encouraged to take MATH 225 in the spring of their sophomore year to reduce the heavy load of math courses in the fall of the Sophomore year. MATH 492 will only be offered in the fall.
6) The new SLO will be addressed and assessed in MATH 492 as part of the Mathematics concentration. Since Actuarial Science majors will also take MATH 492, they will also will benefit from the project(s) addressing this SLO.

Revision to SLOs:  Yes ☑  No ☐

One additional SLO:

1) Investigate, discuss, and respond to ethical and social challenges in a mathematical context.
2) (Communication Fluency, Personal and Social Responsibility, Information Literacy)
3) Addressed in MATH 492; Senior Capstone.
4) This SLO will be assessed in MATH 492: Senior Capstone through a project and presentation to a general,
**Program Modification**

non-math audience.

New Curriculum Map:
Other changes: Yes ☑ No □

Program Goals/Strengths:
The new SLO creates an additional Personal and Social Responsibility component to the curriculum which strengthens the program goals as they relate to social justice and personal responsibility.

Discussions with affected departments:
The Math Program Working Group met throughout Fall 2018 to discuss all math program changes. Changes presented to the CSMS Department at a Department meeting on 12/3/2018. Math Department Faculty vote on 1/30/2019: in favor.

Proposed by: Lisa Driskell

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Science
Major: Mathematics
Concentration: Actuarial Science

About This Major . . .
The actuarial science concentration in statistics prepares students for graduate work in actuarial science or to enter the job force. With some additional job-specific training, students entering the job market could function as actuaries in the insurance field or as applied statisticians working in areas such as risk management and marketing.

For more information on what you can do with this major, visit Career Services' What to Do with a Major? resource.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Construct multi-step problem-solving strategies, and communicate solutions effectively in written form. (Specialized Knowledge, Quantitative Fluency)
2. Use statistical software (including calculators) to aid in problem-solving and investigation, and understand its limitations. (Applied Learning)
3. Apply appropriate statistical procedures and justify chosen assumptions. (Applied Learning, Personal and Social Responsibility)
4. Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy)
5. Draw statistical conclusions and evaluate the validity of others’ conclusions. (Critical Thinking, Information Literacy)
6. Communicate technical analyses to non-specialists. (Communication Fluency)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS
- 2.50 cumulative GPA or higher in coursework toward the major content area
- At most one “D” may be used in completing major requirements.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of "C" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- MATH 151 - Calculus I (5)*
  *3 credits apply to the Essential Learning requirements and 2 credits apply to general electives.

Humanities (3 semester hours)
- Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

History (3 semester hours)
- Select one History course (3)

Fine Arts (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (8 semester hours)
- MATH 152 - Calculus II (5)
- STAT 241 – Introduction to Business Analysis (3) *or CISB 241 – Introduction to Business Analysis (3)
BS, MATHEMATICS, ACTUARIAL SCIENCE REQUIREMENTS (543-554 semester hours)

Required Core Courses (151 semester hours)
- MATH 150 - Topics and Careers in Mathematics (1)
- MATH 225 - Computational Linear Algebra (3) (2)
- MATH 253 - Calculus III (4)
- MATH 492 – Senior Capstone (3)
- One of the following courses:
  - CSCI 110 - Beginning Programming (3) with CSCI 110L - Beginning Programming Laboratory (1)
  - CSCI 111 - CS1: Foundations of Computer Science (4)
  - CSCI 130 – Introduction to Engineering Computer Science (4)

Required Concentration Courses (304 semester hours)
- CSCI 260 – Introduction to Database (3)
- STAT 301 – Computational Statistics (3)
- STAT 312 - Correlation and Regression (3)
- STAT 350 - Mathematical Statistics I (3)
- STAT 351 - Mathematical Statistics II (3)
- CISB 341 – Quantitative Decision Making (3)
- ECON 201 - Principles of Macroeconomics (3)
- ECON 415 - Econometrics (3)
- FINA 310 - Risk Management (3)
- FINA 412 - Life and Health Insurance Licensure and Financial Planning (3)
- STAT 460 - Actuarial Exams Preparation (3)

Concentration Electives (9-10 semester hours)
Choose three courses from the groups below. At least two courses must be from Group A and the third course may be from Group A or Group B.

Group A:
- STAT 313 - Sampling Techniques (3)
- STAT 425 – Design and Analysis of Experiments (3)
- STAT 430 – Categorical Data Analysis (3)
- STAT 435 – Introduction to Time Series (3)

Group B:
- MATH 240 – Introduction to Advanced Mathematics (4)
- MATH 361 - Numerical Analysis (4)
- MATH 362 - Fourier Analysis (3)
- MATH 365 – Mathematical Modeling (3)
- MATH 369 – Discrete Structures I (3)

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 20-21 semester hours, 3-7 hours may need to be upper division.)
- MATH 151 – Calculus I (2)
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits
- MATH 151 - Calculus I (5)
- CSCI 111 - Computer Science 1: Foundations (4) or CSCI 110/CSCI 110L - Beginning Programming and Laboratory (4) or CSCI 130 - Introduction to Engineering Computer Science (4)
- ENGL 111 - English Composition (3)
- Essential Learning - Social and Behavioral Sciences (3)

Freshman Year, Spring Semester: 16 credits
- MATH 150 – Topics and Careers in Mathematics (1)
- MATH 152 – Calculus II (5)
- Essential Learning – History (3)
- ENGL 112 - English Composition (3)
- Essential Learning – Social and Behavioral Sciences (3)
- KINA Activity (1)

Sophomore Year, Fall Semester: 16 credits
- MATH 225 - Computational Linear Algebra (2)
- ECON 201 – Principles of Macroeconomics (3)
- MATH 253 - Calculus III (4)
- Essential Learning – Fine Arts (3)
- Essential Learning – Humanities (3)
- STAT 241 – Introduction to Business Analysis (3)

Sophomore Year, Spring Semester: 15 credits
- MATH 225 – Computational Linear Algebra (3) (2)
- ECON 301 – Principles of Macroeconomics (3)
- CSCI 260 – Introduction to Database (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 – Essential Speech (1)
- KINE 100 – Health and Wellness (1)
- Essential Learning – Natural Science with Lab (4)

Junior Year, Fall Semester: 15 credits
- STAT 301 – Computational Statistics (3)
- FINA 310 – Risk Management (3)
- CISB 341 – Quantitative Decision Making (3)
- STAT 350 – Mathematical Statistics I (3)
- General Elective (3)

Junior Year, Spring Semester: 15 credits
- STAT 312 – Correlation and Regression (3)
- STAT 351 – Mathematical Statistics II (3)
- Concentration Elective from Group A or B (3)
- Essential Learning – Nature Science (3)
- General Electives (3)

Senior Year, Fall Semester: 15-16 credits
- FINA 412 – Life and Health Insurance Licensure and Financial Planning (3)
- Concentration Elective from Group A or B (3-4)
- MATH 492 – Senior Capstone (3)
- General Electives (6-9)

Senior Year, Spring Semester: 13-14 credits

2019-20 BS, Mathematics, Actuarial Science (###). Posted:
- ECON 415 Econometrics (3)
- STAT 460 – Actuarial Exam Preparation (3)
- Concentration Elective from Group A or B (3)
- General Electives (A 56-7)
Program Modification

Mathematics-Applied Mathematics: 3437

Degree Type: BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:

Note, some modifications were approved by the Undergraduate Curriculum Committee on 10/25/2019. They are listed below, but will not be addressed in the justification.

PRIOR APPROVAL:
* Move MATH 240 (Introduction to Advanced Mathematics) from Core to Concentration Courses.
* Move choose one: CSCI 110/110L or CSCI 111 from Concentration to Core Courses.
* Replace STAT 311 with STAT 301.
* Replace STAT 412 with STAT 312.

NEW
1) Increase the credits for MATH 225 (Computational Linear Algebra) from 2 to 3.
2) Add MATH 492 (Senior Capstone) (3 credits) to the Core Courses.
3) Add CSCI 130 (Introduction to Engineering Computer Science) (4 credits) to the list of intro CSCI courses in the Core Courses and remove CSCI 130 from the required concentration courses.
4) Remove MATH 484 (Senior Seminar I) and MATH 494 (Senior Seminar II) from the program (replaced with MATH 492)

5) Remove Math 325 (Linear Algebra) from required courses.
6) Category 3 on program sheet: Add MATH 325 (Linear Algebra) and MATH 352 (Advanced Calculus) and remove MATH 452 (Real Analysis I) and MATH 460 (Advanced Linear Algebra).
7) Course sequencing: List MATH 225 (Computational Linear Algebra) as a Spring course and MATH 492 (Senior Capstone) as a fall course in the course sequencing.

SLOs:
8) New SLO: Investigate, discuss, and respond to ethical and social challenges in a mathematical context.
    (Communication Fluency, Personal and Social Responsibility, Information Literacy)
9) Edited the last SLO.

Justification:

These modifications are part of a significant overhaul of the mathematics programs.
1) Increase in credits for MATH 225 reflects the current course mod aimed at improving the various program concentrations of Mathematics.
2) & 4) With the overhaul to mathematics, the Senior Seminar sequence (MATH 484, MATH 494) is being replaced with one course, MATH 492 (Senior Capstone) which will be suitable for students in all concentrations of mathematics. In particular, Applied Math students will complete an applied math related final project for the course.
3) CSCI 130 is being modified at the request of Engineering. The modified course is a suitable (and possibly favorable) alternative to the other introductory computer science courses and thus will be added to the "choose one" list. It will no longer be appropriate for students to take both CSCI 111 and CSCI 130, so moving CSCI 130 from a required course to an option with CSCI 111 or CSCI 110 reduces the credits/required courses for the degree.

5) Three credits of Linear Algebra is standard for BS programs in mathematics. With the increase in credits of MATH 225 (Computational Linear Algebra) from 2 to 3, we are able to remove MATH 325 (Linear Algebra) from the required course list.
6) Category 3 on program sheet: Because MATH 325 (Linear Algebra) is a prerequisite for MATH 460 (Advanced Linear Algebra) and MATH 352 (Advanced Calculus) is a (new) prerequisite for MATH 452 (Intro to Real Analysis I), we must replace the 400-level courses with their 300-level prerequisites. It was determined that having MATH 325 and MATH 352 in place of MATH 460 and MATH 452 in the category 3...
Program Modification

electives list still strengthens the math component of the Applied math degree, as intended.

7) Students will be encouraged to take MATH 225 in the spring of their sophomore year to reduce the heavy load of math courses in the fall of the Sophomore year. MATH 492 will only be offered in the fall.

8) The new SLO was created to address the new Personal and Social Responsibility university SLO. The SLO will be addressed and assessed in MATH 492 through project(s) and presentation(s).
9) The last SLO was modified to match the language of the last SLO in the Mathematics and Statistics concentrations.

Revision to SLOs: Yes ☑️ No ☐

One additional SLO:
SLO: Investigate, discuss, and respond to ethical and social challenges in a mathematical context.
Linkage: (Communication Fluency, Personal and Social Responsibility, Information Literacy)
Map: Addressed in MATH 492; Senior Capstone.
Assessment of SLO: This SLO will be assessed in MATH 492: Senior Capstone through a project and presentation to a general, non-math audience.

New Curriculum Map: [Numbers are the SLO numbers, and are not referencing the items 1-4 listed above] SLO (mapping to university SLO). [Courses identified for program assessment.]

(1) Use methods of Applied mathematics to model and solve applied problems. (Specialized Knowledge, Quantitative Fluency, Applied Learning) [MATH 253 (Calculus III), MATH 366 (Methods of Applied Mathematics II), MATH 466 (Methods of Applied Mathematics III)]

(2) Use mathematical software (including calculators) to aid in problem-solving and investigation, and understand its limitations. (Applied Learning) [MATH 225 (Computational Linear Algebra), MATH 366 (Methods of Applied Mathematics II), MATH 466 (Methods of Applied Mathematics III)]

(3) Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking) [MATH 240 (Intro to Advanced Math)]

(4) Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy) [MATH 492 (Senior Capstone)]

(5) Demonstrate comprehension of an advanced topic in applied mathematics and deliver written and oral presentations. (Specialized Knowledge, Communication Fluency, Information Literacy) [MATH 492 (Senior Capstone)]

Assessments will be through homework problems, projects, presentations, portfolios, and common exam questions and will be scored using common rubrics.

Other changes: Yes ☑️ No ☐

Program Goals/Strengths:
Addressing the new SLO creates social justice and personal responsibility component to the curriculum which strengthens the program.

The increase in credits of MATH 225 (Computational Linear Algebra) from 2 to 3 credits and moving MATH 325 from required to a list of restricted electives puts this program in line with similar applied math programs. Previously, 5 credits of linear algebra were required whereas typical math/applied math programs require only three credits, either at the 200-level or 300-level, but not both.

Discussions with affected departments:
Program Modification

The Math Program Working Group met throughout Fall 2018 to discuss all math program changes. Changes presented to the CSMS Department at a Department meeting on 12/3/2018. Math Department Faculty voteon 1/30/2019: in favor.

Proposed by: Lisa Driskell
Director of Teacher Education Signature:
Expected Implementation: Fall 2019
About This Major . . .
Applied mathematicians use mathematics to solve problems. This program provides mathematics coursework commonly found in applied math settings. Applied mathematics graduates can choose to find work in a variety of areas, or may choose to continue their educations by attending graduate school in areas such as applied mathematics, computer science and engineering. For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html and https://www.siam.org/careers/thinking.php.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Use methods of applied mathematics to model and solve applied problems (Specialized Knowledge/Applied Learning/Quantitative Fluency)
2. Use mathematical software (including calculators) to aid in problem-solving and investigation, and understand its limitations. (Applied Learning)
3. Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking)
4. Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy)
5. Demonstrate comprehension of applied mathematics and deliver a substantial written and oral presentation in an area of applied mathematics. (Specialized Knowledge/Communication Fluency/Information Literacy)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:
- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.50 cumulative GPA or higher in coursework toward the major content area.
- At most one “D” may be used in completing major requirements.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 151 - Calculus I (5)
  3 credits apply to the Essential Learning requirements and 2 credits apply to elective credit.

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (8 semester hours)
- MATH 152 - Calculus II (5)
- STAT 200 - Probability and Statistics (3)
BS, MATHEMATICS, APPLIED MATHEMATICS REQUIREMENTS (44-47 50-53 semester hours)
A 2.5 GPA is required in the major courses. At most one “D” may be used in completing major requirements.

Core Courses (158 semester hours)
- MATH 150 - Topics and Careers in Math (1)
- MATH 225 - Computational Linear Algebra (3) (2)
- MATH 240 - Intro to Advanced Mathematics (4)
- MATH 253 - Calculus III (4)
- MATH 325 - Linear Algebra (3)
- MATH 484 - Senior Seminar I (2)
- MATH 494 - Senior Seminar II (2)
- MATH 492 - Senior Capstone (3)
- One of the following courses:
  - CSCI 110 - Beginning Programming (3) with CSCI 110L - Beginning Programming Laboratory (1)
  - CSCI 111 - CS1: Foundations of Computer Science (4)
  - CSCI 130 – Introduction to Engineering Computer Science (4)

Required Concentration Courses (20-22 23-25 semester hours)
- One of the following courses:
  - CSCI 110 - Beginning Programming (3) with CSCI 110L - Beginning Programming Laboratory (1)
  - CSCI 111 - CS1: Foundations of Computer Science (4)
  - CSCI 130 – Introduction to Engineering Computer Science (3)
- CSCI 310 - Advanced Programming (1-3)
- MATH 240 - Introduction to Advanced Mathematics (4)
- MATH 260 - Differential Equations (3)
- MATH 360 - Methods of Applied Mathematics (3)
- MATH 365 - Mathematical Modeling (3)
- MATH 366 - Methods of Applied Mathematics II (3)
- MATH 466 - Methods of Applied Mathematics III (3)

Concentration Electives (9-10 semester hours)
Category 1 - select one of the following courses:
- STAT 3011 – Computational Statistical Methods (3)
- STAT 4312 - Correlation and Regression (3)
- STAT 425 - Design and Analysis of Experiments (3)
Category 2 - select one of the following courses:
- MATH 361 - Numerical Analysis (4)
- MATH 362 - Fourier Analysis (3)
- MATH 369 - Discrete Structures I (3)
- CSCI 380 - Operations Research (3)
Category 3 - select one of the following courses:
- MATH 325 - Linear Algebra (3)
- MATH 352 – Advanced Calculus (3)
- MATH 450 - Complex Variables (3)
- MATH 452 – Introduction to Real Analysis I (3)
- MATH 460 – Advanced Linear Algebra (3)
- PHYS 471 - Computational Physics I (3)

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 22-25 28-31 semester hours; 9-12 8-11 hours of upper division may be needed.)
- MATH 151 - Calculus I (2)
- MATH
- MATH
- MATH
- MATH
- MATH
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 16 credits
- MATH 151 - Calculus I (5)
- ENGL 111 - English Composition (3)
- KINA Activity (1)
- KINE 100 - Health and Wellness (1)
- Essential Learning - Natural Science (3)
- Essential Learning - Social and Behavioral Sciences (3)

Freshman Year, Spring Semester: 16 credits
- MATH 152 - Calculus II (5)
- ENGL 112 - English Composition (3)
- MATH 150 - Topics and Careers in Mathematics (1)
- CSCI 111 - Computer Science 1: Foundations (4) or CSCI 110/CSCI 110L - Beginning Programming and Laboratory (4) or CSCI 130 - Introduction to Engineering Computer Science (4)
- Essential Learning - Social and Behavioral Sciences (3)

Sophomore Year, Fall Semester: 176 credits
- MATH 240 - Intro to Advanced Mathematics (4)
- MATH 225 - Computational Linear Algebra (2)
- MATH 253 - Calculus III (4)
- STAT 200 - Probability and Statistics (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - History (3)

Sophomore Year, Spring Semester: 16 credits
- MATH 225 - Computational Linear Algebra (3) (2)
- MATH 260 - Differential Equations (3)
- MATH 325 - Linear Algebra (3)
- STAT 200 - Probability and Statistics (3)
- CSCI 130 - Introduction to Engineering Computer Science (3)
- Essential Learning - Natural Science with Lab (4)
- Essential Learning - Humanities (3)
- General Elective (3)

Junior Year, Fall Semester: 14-16 credits
- MATH 360 - Methods of Applied Math (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- CSCI 310 - Advanced Programming (1-3)
  Concentration Elective (3)
  General Elective (3)
  Essential Learning - Humanities (3)

Junior Year, Spring Semester: 15-16 credits
- MATH 366 - Methods of Applied Math II (3)
- MATH 365 - Mathematical Modeling (3)
- Concentration Elective (3-4)
|| General Electives (6)

<table>
<thead>
<tr>
<th>Senior Year, Fall Semester: <strong>24</strong> credits</th>
</tr>
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<tbody>
<tr>
<td>MATH 466 - Methods of Applied Math III (3)</td>
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<tr>
<td>MATH 492 – Senior Capstone (3)</td>
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<tr>
<td>MATH 484 - Senior Seminar I (2)</td>
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<td>Concentration Elective (3)</td>
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<tr>
<td>General Electives (66)</td>
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</tbody>
</table>

| Senior Year, Spring Semester: **11-14 10-13** credits |
|--------------------------------|-----------------|
|  MATH 494 – Senior Seminar II (2) |
|  Concentration Elective (3) |
|  General Electives (8-11) |
Program Modification

Mathematics-Statistics: 3434

Degree Type: BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:

Note, this program underwent significant modifications and was approved by the Undergraduate Curriculum Committee on 10/25/2018. This new modification reflects the necessary changes due to the changes within the other mathematics programs.

*All NEW modifications for approval are highlighted in yellow.

1) Increase the credits for MATH 225 (Computational Linear Algebra) from 2 to 3.
2) Add MATH 492 (Senior Capstone) (3 credits) to the Core Courses.
3) Add CSCI 130 (Introduction to Engineering Computer Science) (4 credits) to the list of intro CSCI courses in the Core Courses.
4) Remove MATH 484 (Senior Seminar) (2 credits) and STAT 492 (Senior Capstone) (1 credit) from the program (replaced with MATH 492).

5) In the course sequencing, list MATH 225 (Computational Linear Algebra) as a Spring course and MATH 492 (Senior Capstone) as a fall course in the course sequencing.

SLOs

6) New SLO: Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy)
7) Edited the last SLO.
8) Note, all other modifications (STAT 301, STAT 312, STAT 313, etc.) were part of the program modification approved in October 2018.

Justification:

These modifications are part of a significant overhaul of the mathematics programs.
1) Increase in credits for MATH 225 reflects the current course mod aimed at improving the various program concentrations of Mathematics.
2) & 4) STAT 492 was created as a second semester to MATH 484 (Senior Seminar I) for statistics students because the current Senior Seminar structure (MATH 484 and MATH 494) for Mathematics was no longer suitable for students in Statistics after the previous program modification. With the overhaul to mathematics, the Senior Seminar sequence (MATH 484, MATH 494) is being replaced with one course, MATH 492 (Senior Capstone) which will be suitable for students in all concentrations of mathematics. In particular, Statistics students will complete statistics-related final project for the course.
3) CSCI 130 is being modified at the request of Engineering. The modified course is a suitable (and possibly favorable) alternative to the other introductory computer science courses and thus will be added to the "choose one" list.

5) Students will be encouraged to take MATH 225 in the spring of their sophomore year to reduce the heavy load of math courses in the fall of the Sophomore year. MATH 492 will only be offered in the fall.

6) The new SLO will be addressed and assessed in MATH 492 as part of the Mathematics concentration. Since Actuarial Science majors will also take MATH 492, they will also will benefit from the project(s) addressing this SLO.
7) The last SLO was modified to match the language of the last SLO in the Mathematics and Applied Math concentrations.

Revision to SLOs: Yes ☑ No ☐

One additional SLO:
**Program Modification**

SLO: Investigate, discuss, and respond to ethical and social challenges in a mathematical context.
Linkage: (Communication Fluency, Personal and Social Responsibility, Information Literacy)
Map: Addressed in MATH 492; Senior Capstone.
Assessment of SLO: This SLO will be assessed in MATH 492: Senior Capstone through a project and presentation to a general, non-math audience.

Other changes: Yes ☑ No ☐

**Program Goals/Strengths:**
The new SLO creates an additional Personal and Social Responsibility component to the curriculum which strengthens the program goals as they relate to social justice and personal responsibility.

**Discussions with affected departments:**
The Math Program Working Group met throughout Fall 2018 to discuss all math program changes. Changes presented to the CSMS Department at a Department meeting on 12/3/2018. Math Department Faculty vote on 01/30/2019: in favor.

Proposed by: Lisa Driskell
Director of Teacher Education Signature:
Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Science
Major: Mathematics
Concentration: Statistics

About This Major . . .
The statistics concentration in mathematics prepares students for graduate work in statistics or to enter the job force. With some additional job-specific training, students entering the job market could function as applied statisticians working in areas such as actuarial science, wildlife management, marketing, quality control, and epidemiology to name a few.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major and concentration will be able to:

1. Construct multi-step problem-solving strategies and communicate solutions effectively in written form. (Specialized Knowledge, Quantitative Fluency)
2. Use mathematical software (including calculators) to aid in problem-solving and investigation, and understand its limitations. (Applied Learning)
3. Apply appropriate statistical procedures and justify chosen assumptions. (Applied Learning, Ethical Reasoning, Personal and Social Responsibility)
4. Draw statistical conclusions and evaluate the validity of others' conclusions. (Critical Thinking, Information Literacy)
5. Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy)
6. Communicate technical analyses to non-specialists. (Communication Fluency)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

• Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
• Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
• Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
• Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar's Office regarding next steps.

2019-20 BS, Mathematics, Statistics (3434). Posted:
INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.50 cumulative GPA or higher in coursework toward the major content area
- At most one "D" may be used in completing major requirements.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 151 - Calculus I (5)
  3 credits apply to the Essential Learning requirements and 2 credits apply to Elective credit.

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (8 semester hours)
- MATH 152 - Calculus II (5)
- STAT 200 - Probability and Statistics (3)
BS, MATHEMATICS, STATISTICS REQUIREMENTS (42-47 semester hours. A 2.5 GPA is required in the major courses. At most one “D” may be used in completing major requirements.)

Core Courses (18 semester hours)
- MATH 150 - Topics and Careers in Mathematics (1)
- MATH 225 - Computational Linear Algebra (3)
- MATH 240 - Introduction to Advanced Mathematics (4)
- MATH 253 - Calculus III (4)
- MATH 325 - Linear Algebra (3)
- MATH 484 - Senior Seminar I (2)
- MATH 494 - Senior Seminar II (2)
- MATH 492 - Senior Capstone (3)
- One of the following courses:
  - CSCI 110 - Beginning Programming (3) with CSCI 110L - Beginning Programming Laboratory (1)
  - CSCI 111 - Computer Science CS1: Foundations of Computer Science (4)
  - CSCI 130 - Introduction to Engineering Computer Science (4)

Required Concentration Courses (18 semester hours)
- CSCI 111 - Computer Science CS1: Foundations (4)
- CSCI 260 - Introduction to Database Design (3)
- One of the following courses:
  - MATH 452 - Introduction to Real Analysis I (3)
  - MATH 460 - Advanced Linear Algebra (2)
- STAT 311 - Statistical Methods (3)
- STAT 301 - Computational Statistical Methods (3)
- STAT 312 - Correlation and Regression (3)
- STAT 313 - Sampling Techniques (3)
- STAT 350 - Mathematical Statistics I (3)
- STAT 351 - Mathematical Statistics II (3)
- STAT 412 - Correlation and Regression (3)
- STAT 425 - Design and Analysis of Experiments (3)
- MATH 484 - Senior Seminar I (2)
- STAT 492 - Senior Capstone (1)

Concentration Electives (12-14 semester hours)
- One of the following courses:
  - MATH 240 - Introduction to Advanced Mathematics (4)
  - MATH 369 - Discrete Structures I (3)

Choose three courses from the groups below. At least two courses must be from Group A and the third course may be from Group A or Group B. You must choose at least two courses from Group A and a total of three courses from Groups A and B combined.

Group A:
- STAT 313 - Sampling Techniques (3)
- STAT 430 - Categorical Data Analysis (3)
- STAT 435 - Introduction to Time Series (3)

Group B:
- MATH 361 - Numerical Analysis (4)
- MATH 362 - Fourier Analysis (3)
- MATH 365 - Mathematical Modeling (3)

2019-20 BS, Mathematics, Statistics (3454). Posted:
GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 3229-31 28-30 semester hours, 128-10 9-13 additional upper division hours may be needed.)

- MATH 151 - Calculus I (2)
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 16 credits
- MATH 151 - Calculus I (5)
- CS of Computer Science CSCI 111 - Computer Science 1: Foundations (4)
- ENGL 111 - English Composition (3)
- KINA Activity (1)
- KINE 100 - Health and Wellness (1)
- Essential Learning - Natural Science (3)
- Essential Learning - Social and Behavioral Sciences (3)

Freshman Year, Spring Semester: 16 credits
- MATH 150 - Topics and Careers in Mathematics (1)
- MATH 152 - Calculus II (5)
- ENGL 112 - English Composition (3)
- Essential Learning - History (3)
- Essential Learning - Natural Science (3)
- Essential Learning - Social and Behavioral Sciences (3)
- CSCI 111 - CS1: Foundations of Computer Science (4) or CSCI 110 / CSCI 110L - Beginning Programming and Laboratory (4)
- KINE 100 - Health and Wellness (1)

Sophomore Year, Fall Semester: 16 credits
- MATH 225 - Computational Linear Algebra (3)
- STAT 200 - Probability and Statistics (3)
- MATH 253 - Calculus III (4)
- Essential Learning - Fine Arts (3)
- Essential Learning - Humanities (3)
- STAT 200 - Probability and Statistics (3)
- Essential Learning - History (3)
- General Elective (3)

Sophomore Year, Spring Semester: 13-14 credits
- MATH 225 - Computational Linear Algebra (3)
- MATH 240 - Introduction to Advanced Mathematics (4) or MATH 369 – Discrete Structures I (3)
- CSCI 260 – Introduction to Database Design (3)
- Essential Learning - Natural Science with Lab (4)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- General Elective (3)

Junior Year, Fall Semester: 15 credits
- MATH 325 - Linear Algebra I (3)
- STAT 311 - Statistical Methods (3)
- STAT 350 - Mathematical Statistics I (3)
- Essential Learning - Humanities (3)
- Essential Learning - Natural Science (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- General Elective (3)

Junior Year, Spring Semester: 15 credits
- STAT 313 - Sampling Techniques (3)
- STAT 312 – Correlation and Regression (3)
- STAT 351 - Mathematical Statistics II (3)
- Concentration Elective from Group A or B (3)
### Senior Year, Fall Semester: 14 credits
- **MATH 452 - Introduction to Real Analysis I** (3) or **MATH 460 - Linear Algebra II** (3)
- **STAT 412 - Correlation and Regression** (3)
- **STAT 425 - Design and Analysis of Experiments** (3)
- **Concentration Elective from Group A or B** (3-4)
- **MATH 484 - Senior Seminar I** (2)
- **MATH 492 - Senior Capstone** (3)

### General Electives (6)

### Senior Year, Spring Semester: 13 credits
- **STAT 425 - Design and Analysis of Experiments** (3)
- **MATH 494 - Senior Seminar II** (2)
- **STAT 492 - Senior Capstone** (1)
- **Concentration Elective from Group A or B** (3)
- **General Electives** (6-118-10)
Program Modification

Computer Science: M450

Degree Type: Minor

Revision to program sheet: Yes ☑ No ☐

Description of modification:
Add CSCI 130 Introduction to Engineering Computer Science as an option of taking CSCI 111 CS1: Foundations of Computer Science. This means that CSCI 130 is removed from the choice list, with CSCI 260 Introduction to Database added in its stead.

Justification:
The major change in this program is because of the change in the CSCI 130 Introduction to Engineering Computer Science, which will now teach C++ and can serve as a prerequisite for CSCI 112 as well. The list of lower division Choice List classes in the minor were those including instruction in important areas in computer science not covered in earlier required courses. What students take is dependent on their area of interest. Since CSCI 130 is now very close to CSCI 111, taking both courses would be redundant. Removing it from the option list allows the addition of the new course CSCI 260 Introduction to Database, which would be a perfect replacement course for this Lower Division choice section.

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☐ No ☑

NA

Discussions with affected departments:
NA

Necessary change due to the modification of CSCI 130. CS faculty have discussed this change to CSCI 130 and the resulting necessary changes in Fall 2018.

Proposed by: Lori K. Payne

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Minor...
Computer science is the study of algorithms and the issues involved in implementing them. A Minor in Computer Science is an excellent enhancement to degrees in the many fields which make extensive use of computer software, such as engineering, physics, and mathematics, but also for non-science fields such as graphic arts, education, or sociology. The degree prepares students to understand computer science foundations in software development and in hardware, as well as common application software development such as database software, graphical user interfaces, or in video game design.

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a minor. Meeting with an academic advisor is essential in planning courses and developing a suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended minor.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a minor. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head for the minor. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
A minor cannot be awarded by itself. It must be combined with a baccalaureate degree outside the major field of study. Students should follow the graduation process outlined for the baccalaureate degree and list their majors and minors on the "Intent to Graduate" form.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL MINOR REQUIREMENTS
The following institutional requirements apply to all CMU minors. Specific programs may have different requirements that must be met in addition to institutional requirements.

- A minor consists of 15-24 semester hours. There may be prerequisites required for the minor which will increase the total number of credit hours for a student who has not already taken those prerequisites.
- Courses taken to satisfy Essential Learning, major requirements, or electives can be counted toward the minor if applicable.
- At least 33 percent of the credit hours required for the minor must be in courses numbered 300 or above.
- At least 25 percent of the classes must be taken at CMU.
- 2.00 cumulative GPA or higher for the courses used for the minor.
- A minor is not a degree by itself and must be earned at the same time as a baccalaureate degree.
- A minor must be outside the major field of study.
- A student may earn up to five minors with any baccalaureate degree at CMU.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements sheet you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC MINOR REQUIREMENTS
- 23-24 semester hours total for the Minor in Computer Science.

REQUIRED COURSES FOR THE COMPUTER SCIENCE MINOR (23-24 semester hours)

- CSCI 111 - CSI: Foundations of Computer Science (4)
- OR
- CSCI 130 – Introduction to Engineering Computer Science (4)
- CSCI 112 - CS2: Data Structures (4)
- CSCI 250 - CS3: Introduction to Algorithms (3)

Choose one of the following courses:
- CSCI 241 - Computer Architecture and Assembly Language (4)
- CSCI 206 - Web Page Design II (3)
- CSCI 260 – Introduction to Engineering Computer Science (3)
- CSCI 260 – Introduction to Database

Choose three of the following courses:
- CSCI 306 - Web Page Design III (3)
- CSCI 310* - Advanced Programming (3)
- CSCI 322 - Embedded Systems (3)
- CSCI 333 - UNIX Operating Systems (3)
- CSCI 337 - User Interface Design (3)
- CSCI 375 - Object Oriented Programming (3)
- CSCI 460 - Database Design (3)

*CSCI 310 is offered for different languages for 1-3 credit hours. A student may meet the required in any combination number of languages/courses/credit hours, to reach a total minimum of 3 hours taken. No language may be counted for credit more than once.
Program Modification

Mathematics: M460

Degree Type: Minor

Revision to program sheet: Yes ☑ No ☐

Description of modification:

1) Increase in credits for MATH 225 (Computational Linear Algebra) from 2 to 3.
2) Increase the total hours from 18-24 to 19-24.

Justification:

1) Increase in credits for MATH 225 reflects the current course mod aimed at improving the various program concentrations of Mathematics.
2) The increase in credits for MATH 225 increases the minimum number of credits for the minor by one.

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☐ No ☑

Discussions with affected departments:

The Math Program Working Group met throughout Fall 2018 to discuss all math program changes. Math Department Faculty vote 1/30/2019: in favor.

Proposed by: Lisa Driskell

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Minor
A minor in mathematics is a natural enhancement to many majors outside mathematics where an understanding of mathematics is needed (e.g. physics, engineering, computer science, chemistry, biology, geology). A minor in mathematics enables non-mathematics majors to complete a focused course of study in mathematics on a smaller scale.

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a minor. Meeting with an academic advisor is essential in planning courses and developing a suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfil the requirements for her/his intended minor.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a minor. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head for the minor. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
A minor cannot be awarded by itself. It must be combined with a baccalaureate degree outside the major field of study. Students should follow the graduation process outlined for the baccalaureate degree and list their majors and minors on the “Intent to Graduate” form.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL MINOR REQUIREMENTS
The following institutional requirements apply to all CMU minors. Specific programs may have different requirements that must be
met in addition to institutional requirements.
• A minor consists of 15-24 semester hours. There may be prerequisites required for the minor which will increase the total
number of credit hours for a student who has not already taken those prerequisites.
• Courses taken to satisfy Essential Learning, major requirements, or electives can be counted toward the minor if applicable.
• At least 33 percent of the credit hours required for the minor must be in courses numbered 300 or above.
• At least 25 percent of the classes must be taken at CMU.
• 2.00 cumulative GPA or higher for the courses used for the minor.
• A minor is not a degree by itself and must be earned at the same time as a baccalaureate degree.
• A minor must be outside the major field of study.
• A student may earn up to five minors with any baccalaureate degree at CMU.
• The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate.
Visit with your advisor or academic department to determine which catalog year and program requirements sheet you
should follow.
• See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation
requirements.

PROGRAM-SPECIFIC MINOR REQUIREMENTS

• 198-24 semester hours for the Minor in Mathematics.

REQUIRED COURSES FOR THE MATHEMATICS MINOR (198-24 semester hours)

☑ One of the following:
  MATH 152 - Calculus II (5)
  MATH 136 - Engineering Calculus II (4)

Complete two courses from Group A OR two courses from Group B:

Group A:
  MATH 225 - Computational Linear Algebra (3) (2)
  MATH 240 - Introduction to Advanced Mathematics (4)
  MATH 253 - Calculus III (4)
  MATH 260 - Differential Equations (3)

Group B:
  MATH 236 - Differential Equations and Linear Algebra (4)
  MATH 240 - Introduction to Advanced Mathematics (4)
  MATH 253 - Calculus III (4)

☑

☑

Complete three courses from Group C:
  MATH 310 - Number Theory (3)
  MATH 325 - Linear Algebra (3)
  MATH 352 - Advanced Calculus (3)
  MATH 360 - Methods of Applied Math (3)
  MATH 361 - Numerical Analysis (4)
  MATH 362 - Fourier Analysis (3)
  MATH 365 - Mathematical Modeling (3)
  MATH 366 - Methods of Applied Math II (3)
  MATH 369 - Discrete Structures I (3)
  MATH 370 - Discrete Structures II (3)
  MATH 386 - Geometries (4)
  MATH 420 - Introduction to Topology (3)
  MATH 430 - Mathematical Logic (3)
  MATH 450 - Complex Variables (3)
  MATH 452 - Introduction to Real Analysis I (3)
MATH 453 - Introduction to Real Analysis II (3)
MATH 460 - Advanced Linear Algebra (3)
MATH 466 - Methods of Applied Math III (3)
MATH 490 - Abstract Algebra I (3)
MATH 491 - Abstract Algebra II (3)
MATH 396 - Topics (3) or MATH 496 - Topics (3)

☐ ________________________________

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Program Modification

Mathematics-Secondary Education: 3430

Degree Type: BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Under program requirement change "take" to "pass" Praxis II prior to student teaching (internship) semester.
3. All other changes approved by UCC. The above are additional changes.

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.

Revision to SLOs: Yes ☑ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. ( Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☑ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:

The Computer Science and Mathematics Department and The Center for Teacher Education have both approved these changes as of January 29, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
The Mathematics program is undergoing significant modifications to address several issues and as a result modifications to the Secondary Education program are necessary. In addition, the Teacher Education program has updated their SLOs which are also included in this program.

Note, some modifications were approved by the Undergraduate Curriculum Committee on 10/25/2019. They are listed below, but will not be addressed in the justification.

PRIOR APPROVAL:
* Move MATH 240 (Introduction to Advanced Mathematics) from Core to Concentration Courses.
* Move choose one: CSCI 110/110L or CSCI 111 from Concentration to Core Courses.
* Replace STAT 311 (Statistical Methods) with STAT 301 (Computational Statistics) in the list of restricted electives.
* Other modifications in Oct 2018 are not needed as the new modifications (below) address the same courses.

NEW
1) Increase the credits for MATH 225 (Computational Linear Algebra) from 2 to 3.
2) Add MATH 492 (Senior Capstone)(3 credits) to the Core Courses.
3) Add CSCI 130 (Introduction to Engineering Computer Science)(4 credits) to the list of intro CSCI courses in the Core Courses and remove CSCI 130 from the required concentration courses.

4) Remove MATH 325 (Linear Algebra) from required courses.
5) Move MATH 352 (Advanced Calculus) up in the list of required core courses so courses are in numerical order.
6) Add MATH 310 (Number Theory) to required concentration courses and remove MATH 310 from list of restricted electives.
7) Remove the requirement of Choose One: MATH 415 (Abstract Algebra for Secondary Education) or MATH 490 (Abstract Algebra I) and add MATH 490 (Abstract Algebra I) to the list for the restricted elective.

8) Expand the list for the restricted elective to include MATH 490 (Abstract Algebra I), MATH 361 (Numerical Analysis), MATH 450 (Complex Variables) (along with the already listed courses MATH 365 (Mathematical Modeling) and STAT 301 (Computational Statistics).

Course sequencing:
9) List MATH 225 (Computational Linear Algebra) as a Spring course and MATH 492 (Senior Capstone) as a fall course in the course sequencing.
10) Add MATH 310 as a fall course, change MATH 352 to a spring course and MATH 380 (History of Mathematics) to a fall course.
11) Move EDUC 215 from junior year to sophomore year.

MATH SLOs:
12) Corrected the mapping to the University SLOs to match other math program SLOs.
13) Edited the first SLO to remove the mathematical software portion which is included in the second SLO. The first SLO now aligns with the program SLOs in the other math concentrations.
14) New SLO: Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy)
15) Added additional mapping to university SLOs in SLO 5 (now SLO 6).

EDUCATION SLOs:
Program Modification

16) Changing Program Outcomes for Center for Teacher Education.
17) Under program requirement change "take" to "pass" Praxis II prior to student teaching (internship) semester.

Justification:
Overall Summary: With the addition of the new MATH 492 (Senior Capstone) course for math majors, it was determined that Secondary Education students would also benefit from the course. Because these majors can only take one math course their senior year, including the capstone course required the shifting of several other courses' requirements. State standards for secondary education in math were consulted to be certain that the program modification proposed would still meet (and exceed) all standards. For more info, see item e below and the attached state content standards sheet and course mapping.

These modifications are part of a significant overhaul of the mathematics programs.
1) Increase in credits for MATH 225 reflects the current course mod aimed at improving the various program concentrations of Mathematics.
2) With the overhaul to mathematics, the Senior Seminar sequence (MATH 484, MATH 494) is being replaced with one course, MATH 492 (Senior Capstone) thus allowing secondary education majors to take the course. Previously, they could not take the Senior Seminar sequence because those students are allowed only one math course in their senior year. The new MATH 492 will be suitable for students in all concentrations of mathematics. In particular, Math Education students will complete math pedagogy-related final project for the course.
3) CSCI 130 is being modified at the request of Engineering. The modified course is a suitable (and possibly favorable) alternative to the other introductory computer science courses and thus will be added to the "choose one" list. It will no longer be appropriate for students to take both CSCI 111 and CSCI 130, so moving CSCI 130 from a required course to an option with CSCI 111 or CSCI 110 reduces the credits/required courses for the degree.
4) Three credits of Linear Algebra is standard for all BS programs in mathematics. With the increase in credits of MATH 225 (Computational Linear Algebra) from 2 to 3, we are able to remove MATH 325 (Linear Algebra) from the required course list.
5) Program sheet clean up - Move MATH 352 (Advanced Calculus) up in the list of required core courses so courses are in numerical order.
6) MATH 310 (Number Theory) is required in place of MATH 325 (Linear Algebra) and helps to fulfill the required standards for secondary education in mathematics.
7) After discussion with math education and education faculty, it was determined that secondary education students would benefit more greatly from the experience and requirements of the senior capstone course (MATH 492) over the abstract algebra requirement of MATH 415 (Abstract Algebra for Secondary Education) or MATH 490 (Abstract Algebra I). Since only one math course can be taken during the senior year, MATH 492 was chosen to be that course. MATH 490 (Abstract Algebra I) was moved to the list for the restricted elective as an option for those students prepared to take the course before their senior year. To back up this choice, Math Education faculty member, Dan Schultz-Ela, states the following: "We analyzed requirements of the twelve other institutions in Colorado that offer a bachelor's degree for Secondary Education certification in Mathematics. We specifically looked at whether they required an Abstract Algebra course. Four of the institutions require it, but at a 300 (junior) level. Three others (Ft. Lewis, CU-Boulder, and CU-Colo. Spgs.) only list Abstract Algebra as a choice in a list, either with an Analysis course (equivalent to our Advanced Calculus (MATH 352) course) or Number Theory (MATH 310). Consequently, it seemed justified to replace our requirement for a 400-level Abstract Algebra course with a new requirement for Number Theory and the existing Advanced Calculus course. Abstract Algebra will be moved to a list of options for a required course." Also, as verified by faculty member, Markus Reitenbach, there is no mention of Abstract Algebra on the study guide for the PRAXIS which is the certification exam for secondary education.
8) After examining the list of state standards for the degree, we noticed other possible content areas not included on the current program sheet. To offer students more flexibility in a tightly scheduled program, we added to the restricted elective list the courses corresponding to those content areas: MATH 490 (Abstract Algebra I), MATH 361 (Numerical Analysis), MATH 450 (Complex Variables).

Course sequencing:
9) Students will be encouraged to take MATH 225 in the spring of their sophomore year to reduce the heavy load of math courses in the fall of the sophomore year. MATH 492 will only be offered in the fall.
10) MATH 352 will become a Spring-only course to help with scheduling [Note: the courses MATH 452 (Intro to Real Analysis I) and MATH 490 (Abstract Algebra I) in the Math concentration will now be offered every year, in opposite semesters and so their prerequisites, MATH 352 (Advanced Calculus) and MATH 310 (Number Theory), respectively, must be offered in alternate semesters to create two two-semester sequences.] To create more flexibility with the restricted elective, the required course, MATH 380 (History of Math) will be taught in the fall semester, reducing the number of Spring-only required courses.
11) Education would prefer students take EDUC 115 and EDUC 215 in sequence their sophomore year. Moving EDUC 215 from junior to sophomore year also helps even out the credit hour totals for those semesters.

MATH SLOs
12) The first and third SLO had errors in the mapping to the university SLOS. The edits are to correct those mistakes so that the SLOs now match those in the other math concentrations.
13) Edited the first SLO to remove the mathematical software portion which is included in the second SLO. The first SLO now aligns with the program SLOs in the other math concentrations.
14) The new SLO was created to address the new Personal and Social Responsibility university SLO. The SLO will be addressed and assessed in MATH 492 through project(s) and presentation(s).
15) The SLO on "Effectively communicate..." was modified to add additional mappings to the university SLOs. This SLO is assessed in both the mathematics portion of the program and the education portion of program. The assessment related to the added Specialized Knowledge and Information Literacy will be addressed and assessed in the mathematics program, in MATH 492 (senior capstone).

EDUCATION SLOs:
16) These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
17) Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.

Revision to SLOs: Yes ☑ No ☐

One new SLO (in math):
SLO: Investigate, discuss, and respond to ethical and social challenges in a mathematical context.
Linkage: (Communication Fluency, Personal and Social Responsibility, Information Literacy)
Map: Addressed in MATH 492; Senior Capstone.
Assessment of SLO: This SLO will be assessed in MATH 492: Senior Capstone through a project and presentation to a general, non-math audience.

New Curriculum Map (for math SLOs): [Numbers are the SLO numbers, and are not referencing the items 1-4 listed above]
SLO (mapping to university SLO). [Courses identified for program assessment.]

(1) Construct multi-step problem-solving strategies and communicate solutions effectively in written form. (Specialized Knowledge, Quantitative Fluency) [MATH 253 (Calculus III), MATH 225 (Computational Linear Algebra)]

(2) Use mathematical software (including calculators) to aid in problem-solving and investigation, and
Program Modification

understand its limitations. (Applied Learning) [MATH 225 (Computational Linear Algebra)]

(3) Prove propositions deductively from definitions and theorems, using clear and precise prose. (Critical Thinking) [MATH 240 (Intro to Advanced Math), MATH 352 (Advanced Calculus)]

(4) Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy) [MATH 492 (Senior Capstone)]

(5) Demonstrate familiarity with the logical and historical development of mathematics and the implications of this development. (Specialized Knowledge) [MATH 380 (History of Mathematics)]

(6) Effectively communicate mathematics using oral and written exposition appropriate for teachers of mathematics. (Specialized Knowledge, Communication Fluency, Information Literacy) [MATH 492 (Senior Capstone)]

Modification to Teacher Education SLOs (New Outcomes):
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☑ No ☐

Program Goals/Strengths:
Addressing the new SLO creates social justice and personal responsibility component to the curriculum which strengthens the program.

The increase in credits of MATH 225 (Computational Linear Algebra) from 2 to 3 credits and moving MATH 325 from required to a list of restricted electives puts this program in line with similar secondary education math programs. Previously, 5 credits of linear algebra were required whereas typical math programs require only three credits, either at the 200-level or 300-level, but not both.

By requiring MATH 492 (Senior Capstone) students will experience an individual research/project component which meets the code of Colorado Regulations item: 4.14(2)(g)(v) "apply appropriate knowledge of current research in the teaching and learning of mathematics and incorporate national, state and local guidelines related to mathematics instruction." This new component to the secondary education concentration strengthens the program and its goals of preparing future teachers.

Accreditation etc.:
**Colorado State Endorsement Content Evaluation Worksheet is attached with required CMU program courses listed/mapped to the requirements.

Discussions with affected departments:
The Math Program Working Group met throughout Fall 2018 to discuss all math program changes.
**Program Modification**

Ongoing discussions/notifications to Education Dept. Head throughout Fall 2018. Approval signature included on this form.

Changes presented to the CSMS Department at a Department meeting on 12/3/2018.

Math Department Faculty voteon 1/30/2019: in favor

Modifications to Teacher Education SLOs determined by TEacher Education faculty and approved by math faculty as of 1/29/2019.

Proposed by: Lisa Driskell

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
About This Major . . .

The major in mathematics with a concentration in secondary education will prepare students to teach in both middle schools and in high schools. While completing this degree, students develop problem-solving and critical thinking skills and are introduced to the logical and historical development of mathematical ideas. Students also learn the professional skills in teaching methods and content necessary for secondary mathematics teachers. Nationally recommended curriculum guidelines are followed in order to ensure that graduates have the mathematical content and conceptual understanding necessary for all high school mathematics courses. Graduates from this program are in great demand both locally and statewide with the scarcity of mathematics teachers in this country.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html and/or http://www.coloradomesa.edu/mathstat/links.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

Mathematics Outcomes:
1. Construct multi-step problem solving strategies, use mathematical software tools appropriately, and communicate solutions effectively in written form. (Critical Thinking / Communication Fluency) (Specialized Knowledge, Quantitative Fluency)
2. Use mathematical software (including calculators) to aid in problem-solving and investigation, and understand its limitations. (Applied Learning)
3. Prove propositions deductively from definitions and theorems in clear and precise prose. (Quantitative Fluency) (Critical Thinking)
4. Investigate, discuss, and respond to ethical and social challenges in a mathematical context. (Communication Fluency, Personal and Social Responsibility, Information Literacy)
4. Demonstrate familiarity with the logical and historical development of mathematics and the implications of this development. (Specialized Knowledge)
5. Effectively communicate mathematics using oral and written exposition appropriate for teachers of mathematics. (Specialized Knowledge, Communication Fluency, Information Literacy)

Teacher Education Outcomes:
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)
6. Instruct K-12 students based on self-written learning plans to address individual learning and developmental patterns in Mathematics. (Specialized Knowledge)
7. Design a safe and supportive learning environment for elementary and secondary education students. (Applied Learning)
8. Apply Mathematics content knowledge while working with learners to access information in real world settings assuring learner mastery of the content. (Specialized Knowledge)
9. Integrate assessment, planning, and instructional strategies in coordinated and engaging ways through multiple means of communication. (Critical Thinking/Communication Fluency)
Engage in meaningful and intensive professional learning and self-renewal by regularly examining practice through ongoing study, self-reflection, and collaboration. (Applied Learning)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html. If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS
- 2.80 cumulative GPA or higher in all CMU coursework.
- 2.80 cumulative GPA or higher in coursework toward the major content area.
- All EDUC prefix courses must be completed with a grade of “B” or better.
- Students must take the PRAXIS II exam in the content area prior to beginning the internship. Also, all other coursework toward the degree must be successfully completed prior to the internship.
- A grade of “C” or better must be earned in all required courses, unless otherwise stated.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “B” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 119 - Pre-Calculus Mathematics (5) or higher
  3 credits apply to the Essential Learning requirements and 2 credits apply to elective credit.

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- PSYC 233 - Human Growth and Development (3) (must receive a grade of “B” or higher)
- Select one Social and Behavioral Sciences course (3)
- GEOG 103 - World Regional Geography (3) recommended

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Science course (3)
- Select one Natural Science course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (8 semester hours)
- MATH 151 - Calculus I (5)
- STAT 200 - Probability and Statistics (3)
BS, MATHEMATICS SECONDARY EDUCATION REQUIREMENTS (43-44 semester hours, must pass all courses with a grade of “C” or higher, excepting one “D”, at most, which may be used in completing the major requirements.)

Required Core Courses (20 semester hours)
- MATH 150 - Topics and Careers in Math (1)
- MATH 152 - Calculus II (5)
- MATH 225 - Computational Linear Algebra (3) (2)
- MATH 240 - Intro to Advanced Mathematics (4)
- MATH 253 - Calculus III (4)
- MATH 325 - Linear Algebra (3)
- MATH 492 – Senior Capstone (3)
- One of the following courses:
  - CSCI 111 - CS1: Foundations of Computer Science (4)
  - CSCI 110 - Beginning Programming (3) with CSCI 110L - Beginning Programming Laboratory (1)
  - CSCI 130 – Introduction to Engineering Computer Science (4)

Concentration Courses (20 semester hours)
- MATH 240 - Intro to Advanced Mathematics (4)
- MATH 310 - Number Theory (3)
- MATH 352 - Advanced Calculus (3)
- MATH 369 - Discrete Structures I (3)
- MATH 380 - History of Mathematics (3)
- MATH 386 - Geometries (4)
- MATH 415 - Abstract Algebra for Secondary Education (3)
- MATH 490 - Abstract Algebra I (3)
- One of the following courses:
  - MATH 415 – Abstract Algebra for Secondary Education (2)
  - MATH 490 – Abstract Algebra I (2)
- One of the following courses:
  - MATH 310 - Number Theory (3)
  - MATH 365 – Mathematical Modeling (3)
  - STAT 311 – Statistical Methods (3)

Concentration Electives (3-4 semester hours)
Select one course from the following list:
- MATH 361 – Numerical Analysis (4)
- MATH 365 – Mathematical Modeling (3)
- MATH 450 – Complex Variables (3)
- MATH 490 - Abstract Algebra I (3)
- STAT 301 – Computational Statistics (3)

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 42-3 semester hours. MATH 340 is an option for students.)
- MATH 119 - Pre-Calculus Mathematics (2)

SECONDARY EDUCATION REQUIREMENTS (29 semester hours)
Program Requirements: ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215 (all with a grade of B or better) and formal acceptance to the Teacher Education Program.
- EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
- EDUC 215 - Teaching as a Profession (1) (12 field experience hours)

2019-20 BS, Mathematics, Secondary Education (3430). Posted:
All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. EDUC 497C - Methods of Teaching Secondary Mathematics is only offered in the fall semester. It may be taken with either the 300-level or 400-level EDUC courses but must be taken before the student teaching (internship) semester. Students must take the PRAXIS II exam in the content area prior to commencing the internship. Also, all other coursework toward the degree must be successfully completed prior to the internship.

SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits
- MATH 119 - Pre-Calculus Mathematics (5)
- ENGL 111 - English Composition (3)
- Essential Learning - Humanities (3)
- Essential Learning - Fine Arts (3)
- KINA Activity (1)

Freshman Year, Spring Semester: 16 credits
- MATH 151 - Calculus I (5)
- MATH 150 - Topics and Careers in Math (1)
- ENGL 112 - English Composition (3)
- Essential Learning - Social/Behavioral Science (3)
- Essential Learning - History (3)
- KINE 100 - Health and Wellness (1)

Sophomore Year, Fall Semester: 15 credits
- MATH 152 - Calculus II (5)
- MATH 225 - Computational Linear Algebra (2)
- STAT 200 - Probability and Statistics (3)
- General Elective (3)
- Essential Learning - Natural Science (3)
- PSYC 233 - Human Growth and Development (3)
- EDUC 115 - What It Means to be an Educator (1)

Sophomore Year, Spring Semester: 16 credits
- MATH 225 - Computational Linear Algebra (3)[2]
- MATH 253 - Calculus III (4)
- MATH 240 - Introduction to Advanced Mathematics (4)
- EDUC 215 - Teaching as a Profession (1)
- Essential Learning - Natural Science with Lab (4)
- STAT 200 - Probability and Statistics (3)

Junior Year, Fall Semester: 17-18 credits
- MATH 325 - Linear Algebra I (2)
- CSCI 111 - CS1: Foundations of Computer Science (4) or CSCI 110/110L - Beginning Programming (4) or CSCI 130 - Introduction to Engineering Computer Science (4)
MATH 352 - Advanced Calculus (3)
MATH 310 - Number Theory (3)
MATH 380 - History of Mathematics (3)
MATH 369 - Discrete Structures (3) or Concentration Elective (3-4)
ESSL 290 - Maverick Milestone (3)
ESSL 200 - Essential Speech (1)
EDUC 315 - Teaching as a Profession (1)
MATH 310 - Number Theory (3) or MATH 365 - Mathematical Modeling (3) or STAT 311 - Statistical Methods (3)

Junior Year, Spring Semester: 16 credits
MATH 352 - Advanced Calculus (3)
MATH 380 - History of Mathematics (3)
MATH 386 - Discrete Structures (3) or Concentration Elective (3)
EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3)
EDUC 343 - Teaching to Diversity (3)

Senior Year, Fall Semester: 12 credits
MATH 415 - Abstract Algebra for Secondary Education (3) or MATH 490 - Abstract Algebra I (3)
MATH 492 - Senior Capstone (3)
EDUC 442 - Integrating Literacy Across the Curriculum (3)
EDUC 475 - Classroom Management (1)
EDUC 497 - Content Methodology Practicum (3)
EDUC 497C - Methods of Teaching Secondary Mathematics (2)

Senior Year, Spring Semester: 12 credits
EDUC 499G - Teaching Internship and Colloquia (12)
Program Modification

Liberal Arts-Elementary Education, Mathematics: 3491

Degree Type: BA

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Change "take" to "pass" on program specific requirements. (5th bullet point)
3. Add MATH 205 to the list of courses required prior to being accepted into Teacher Education (last bullet on "program specific requirements on program sheet.)
4. Moving EDUC 475, Classroom Management, up in course sequencing to semester prior student teaching.
5. All other changes approved by UCC. The above are additional changes.

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.
3. Essential Learning Courses should be completed prior to entering the Teacher Education program.
4. Responsibilities during the student teaching semester make it more difficult to complete other course work, so we are moving EDUC 475 to the semester before student teaching.

Revision to SLOs: Yes ☑ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☑ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:
Mathematics and Teacher Education have approved these changes on January 29, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Arts
Major: Liberal Arts, Elementary Education
Concentration: Mathematics

About This Major . . .
The Center for Teacher Education offers a comprehensive program of study that leads to licensure in Colorado. Our professors are experienced, knowledgeable, accessible, and dedicated to the improvement of public education. At Colorado Mesa University, we pride ourselves on the personal touch. Faculty offer one-on-one guidance for course selection, field placements, student teaching, and employment. Our mission is to develop Educators as Innovators; we are always looking to improve the quality of learning in our programs and K-12 schools.

As a student, you will gradually accumulate over 200 hours of classroom experience before beginning student teaching. School districts throughout western Colorado provide opportunities to gain experience with children of all ages and backgrounds in a variety of school settings.

The elementary licensure program provides teacher education candidates with a broad content knowledge and prepares them as teachers for grades kindergarten through six. A minimum of 60 credit hours of Essential Learning and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education elementary licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria. EDUC 115 and EDUC 215 must be taken before applying to the program.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

Mathematics Outcomes:
1. Demonstrate familiarity with the logical and historical development of mathematics and the implications of this development. (Specialized Knowledge)
2. Demonstrate a deep and coherent proficiency in the mathematics underlying elementary curricula. (Quantitative Fluency)
3. Effectively communicate mathematics using oral and written exposition appropriate for teachers of mathematics. (Communication Fluency)
4. Reason mathematically and communicate precisely using clear definitions, appropriate symbols, correct units of measure with an appropriate degree of precision, proper labels, and coherent chains of logic. (Applied Learning)

Teacher Education Outcomes:
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)
6. Instruct K-12 students based on self-written learning plans to address individual learning and developmental patterns. (Specialized Knowledge)
6. Design a safe and supportive learning environment for elementary and secondary education students. (Applied Learning)

7. Apply content knowledge while working with learners to access information in real world settings assuring learner mastery of the content. (Specialized Knowledge)

8. Integrate assessment, planning, and instructional strategies in coordinated and engaging ways through multiple means of communication. (Critical Thinking/Communication Fluency)


Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS
- 126 semester hours for the BA in Liberal Arts, Elementary Education, Mathematics
- 2.80 cumulative GPA or higher in all CMU coursework

2019-20 BA, Liberal Arts, Elementary Education, Mathematics (3491). Posted:
- A cumulative grade point average of 2.8 or higher must be maintained for content courses and overall GPA. A grade of B or better is required for all EDUC courses.
- Foreign language proficiency must be demonstrated by high school coursework (2 years), college coursework (2 semesters), or competency testing.
- Students must pass the PRAXIS II exam in the content area prior to beginning the internship. Also, all other coursework toward the degree must be successfully completed prior to the internship.
- A grade of C or better must be earned in all required courses, unless otherwise stated.
- ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215, and MATH 105 and MATH 205 (all with a grade of "B" or better) and formal acceptance to the Teacher Education Program.
**ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)**

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English**
(6 semester hours, must receive a grade of “B” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics**
(3 semester hours, must be taken after MATH 105. Must receive a grade of “B” or better, must be completed by the time the student has 60 semester hours.)
- MATH 205 - Elements of Mathematics II

**Humanities**
(3 semester hours)
- Select one Humanities course (3) (Essential Learning eligible ENGL or HIST course recommended)

**Social and Behavioral Sciences**
(6 semester hours)
- PSYC 233 - Human Growth and Development (3) (Must earn a grade of “B” or higher)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences**
(7 semester hours, one course must include a lab)
- Select one BIOL course (3)
- Select the corresponding BIOL lab (1)
- Select one GEOL course (3)

**History**
(3 semester hours)
- Select one History course (3) (HIST 131 or HIST 132 recommended)

**Fine Arts**
(3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement**
(2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone**
(4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
BA, LIBERAL ARTS ELEMENTARY EDUCATION, MATHEMATICS REQUIREMENTS (89 Semester Hours)

Elementary Education Core (36 semester hours):

Literacy and Mathematics (15 semester hours)
- ENGL 240 - Children’s Literature (3)
- ENGL 343 - Language systems and Linguistic Diversity (3)
- ENGL 451 - Understanding and Using English Grammar
- MATH 105 - Elements of Mathematics I (3) (Must earn a grade of “B” or higher.)
- MATH 301 - Mathematics for Elementary Teachers (3)

Kinesiology (3 semester hours)
- KINE 321 - Physical Activity and Health in the Classroom (3)

Social Sciences (9 semester hours)
- POLS 101 - American Government (3)
- Select two of the following courses:
  - ANTH 202 - Introduction to Anthropology (3)
  - ARKE 205 - Principles of Archaeology (3) or ARKE 225 - Introduction to North American Archaeology (3)
  - ECON 201 - Principles of Macroeconomics (3)
  - GEOG 102 - Human Geography (3) or GEOG 103 - World Regional Geography (3)
  - HIST 101 - Western Civilizations (3)
  - HIST 102 - Western Civilizations (3)
  - HIST 131 - United States History (3)
  - HIST 132 - United States History (3)
  - HIST 225 - History of Colorado (3)
  - HIST 315 - American Indian History (3)
  - HIST 316 - American Slavery (3)
  - HIST 320 - The American West (3)
  - HIST 331 - The 20th Century (3)
  - HIST 344 - The Age of Industry in America (3)
  - HIST 345 - History of Immigration, Race, and Ethnicity in America (3)

Science (6 semester hours)
- Select Natural Sciences courses from approved Essential Learning list or BIOL 209 or BIOL 210

Art (3 semester hours)
- ARTD 410 - Elementary Art Education Methods (3)

Elementary Education Concentration: Math (15 semester hours):

Math Content Area Required Courses (12 semester hours)
- One of the following courses:
  - CSCI 305 - Technology for Mathematics Educators (3)
  - CSCI 110 - Beginning Programming (3)
- One of the following courses:
  - MATH 151 - Calculus I (5)
  - MATH 146 - Calculus for Biological Sciences (5)
  - MATH 389 - Explorations in Mathematics for Elementary Educators (1)
  - STAT 200 - Probability and Statistics (3)

Concentration Elective (3 semester hours)
- One of the following courses:
  - MATH 305 - Euclidian Geometry (3)

MATH 369 - Discrete Structures (3)
STAT 311 - Statistical Methods (3)
STAT 301 - Computational Statistics (3)
MATH 340 - Ethnomathematics (3)

**Elementary Education Requirements** (38 semester hours) (880 field experience hours)
Program Requirements: ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215, and MATH 105, MATH 205 and formal acceptance to the Teacher Education Program

- EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
- EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
- EDUC 341 - Pedagogy and Assessment: K-6/Elementary (3) (20 field experience hours)
- EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
- EDUC 374 - Exceptional and English Language Learners in the Inclusive Classroom (3)
- EDUC 378 - Technology for K-12 Educators (1)
- EDUC 440 - Methods of Teaching Language and Literacy: Early Childhood (3) (40 field experience hours)
- EDUC 441 - Methods of Teaching Language and Literacy: Elementary (3) (80 field experience hours)
- EDUC 451 - Methods of Teaching Mathematics: Early Childhood/Elementary (3) (60 field experience hours)
- EDUC 461 - Methods of Teaching Science and Social Science: Early Childhood/Elementary (3)
- EDUC 471 - Educational Assessment (1)
- EDUC 475 - Classroom Management (1)
- EDUC 499C - Teaching Internship and Colloquia: Elementary (12) (600 field experience hours)

Praxis II Exam Passed

All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence.
### SUGGESTED COURSE SEQUENCING

#### Freshman Year, Fall Semester: 16 credits
- ENGL 111 - English Composition (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - Geology (3)
- Essential Learning - History (3)
- KINA Activity (1)
- POLS 101 - American Government (3)

#### Freshman Year, Spring Semester: 16 credits
- EDUC 115 - What It Means to be an Educator (1)
- Elementary Core - Natural Sciences (3)
- ENGL 112 - English Composition (3)
- Essential Learning - Social and Behavioral Sciences (3)
- Essential Learning - Humanities (3)
- MATH 105 - Elements of Mathematics I (3)

#### Sophomore Year, Fall Semester: 17 credits
- EDUC 215 - Teaching as a Profession (1)
- Elementary Core - Social Science (3)
- Essential Learning - Biology (3) and Biology Lab (1)
- MATH 205 - Elements of Mathematics II (3)
- PSYC 233 - Human Growth and Development (3)
- STAT 200 - Probability and Statistics (3)

#### Sophomore Year, Spring Semester: 18 credits
- Elementary Core - Natural Science (3)
- Elementary Core - Social Science (3)
- ENGL 240 - Children's Literature (3)
- ESSL 200 - Essential Speech (1)
- ESSL 290 - Maverick Milestone (3)
- MATH 151 - Calculus (5) or MATH 146 - Calculus for Biological Sciences (5)

#### Junior Year, Fall Semester: 16 credits
- EDUC 341 - Pedagogy and Assessment: K-6/Elementary (3)
- EDUC 343 - Teaching to Diversity (3)
- ENGL 343 - Language Systems and Linguistic Diversity (3)
- KINE 100 - Health and Wellness (1)
- MATH 301 - Mathematics for Elementary Teachers (3)
- MATH - Concentration Course (3)

#### Junior Year, Spring Semester: 17 credits
- CSCI 305 - Technology for Mathematics Educators (3) or CSCI 110 - Beginning Programming (3)
- EDUC 374 - Exceptional and English Language Learners in the Inclusive Classroom (3)
- EDUC 378 - Technology for K-12 Educators (1)
- EDUC 440 - Methods of Teaching Language and Literacy: Early Childhood (3)
- ENGL 451 - Understanding and Using English Grammar (3)
- KINE 321 - Physical Activity and Health in the Classroom (3)
- MATH 389 - Explorations in Mathematics (1)

#### Senior Year, Fall Semester: 14 credits
- ARTD 410 - Elementary Art Methods (3)
- EDUC 441 - Methods of Teaching Language and Literacy: Elementary (3)
- EDUC 451 - Methods of Teaching Mathematics: Elementary/Early Childhood (3)
- EDUC 471 - Educational Assessment (1)
- ENGL/EDUC 461 - Methods of Teaching Science and Social Science: Early Childhood/Elementary (3)
- EDUC 475 - Classroom Management (1)

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2019-20 BA, Liberal Arts, Elementary Education, Mathematics (3491). Posted:
Senior Year, Spring Semester: 124 credits

- EDUC 475 - Classroom Management (4)
- EDUC 499C - Teaching Internship and Colloquia: Elementary (12)
Department:  Engineering

Course Modifications

CONM 234

Intended semester to offer modified course for the 1st time:  Fall 2019

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<tr>
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<th>Proposed</th>
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<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
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<tr>
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<tr>
<td>Course Title:</td>
<td>Graphic Communication for Construction Management</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
<tr>
<td>Co-requisites:</td>
<td>Current: CONM 181</td>
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</table>

Requirement or listed choice for any program of study:  Yes ☑  No  ☐
Change affects program sheet or grad requirements:  Yes  ☑  No  ☐

Justification:
The current co-requisite CONM 181 (Principles of Construction Management) offers no direct benefits when taken concurrently with CONM 234 (Graphic Communication for Construction Management) and creates unintended scheduling conflicts for students.

Discussions with affected departments:
This change was discussed with the department head during fall semester 2018.

Proposed by:  Troy L Miller
Expected Implementation:  Fall 2019
Course Modifications

ENGR 305

<table>
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<td>Course Title:</td>
<td>Engineering Economics and Ethics</td>
</tr>
<tr>
<td>Times for Credit:</td>
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<td>Prerequisites:</td>
<td>Current: ENGR 101, ENGR 140, and MATH 119, MATH 135, or MATH 151</td>
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<tr>
<td></td>
<td>Proposed: ENGR 101; ENGR 140; and MATH 135 or MATH 151</td>
</tr>
<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes ☑ No ☐</td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes ☐ No ☑</td>
</tr>
</tbody>
</table>

Justification:
There is a significant difference in student preparation for those who take MATH 119 (pre-calculus) vs MATH 135 or 151 (calculus I) prior to ENGR 305. Accepting MATH 119 as a prreq allows students into a junior-level course before they are academically ready. This modification simply drops MATH 119 as a prreq, requiring students to take MATH 135 or 151 prior to enrolling in ENGR 305.

Discussions with affected departments:
This change was discussed with the engineering department head in January.

Proposed by: Sarah Lanci  Expected Implementation: Fall 2019
Program Modification

Mechanical Engineering Technology: 3453

Degree Type: BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:
Changing CSCI 130 (Introduction to Engineering Computer Science) from 3 to 4 credit hours. This changes the program-specific required course credits from 76 to 77 and the total hours for the degree from 126 to 127.

Justification:
CSCI 130 (Introduction to Engineering Computer Science) is required for the Electrical and Computer Engineering (ECE) degree as dictated by ABET accreditation and the CMU/CU Engineering Partnership. The course is increasing by 1 credit hour as a result of the content being modified to better suit the needs of the ECE program. This results in a minor impact on the BS MET program as CSCI 130 is required for this program. This increase in credit hours will allow for the content to be modernized and tailored for the CMU/CU Boulder Partnership Electrical and Computer Engineering degree to give students background knowledge related to scripting (using MATLAB) in addition to a systems language (such as C++).

Note: CSCI 130 (Introduction to Engineering Computer Science) credits are being modified to align the CMU/CU partnership programs with ABET standards, and that course modification affects this program. This change, however, does not alter this specific program's accreditation alignment.

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☐ No ☑

Discussions with affected departments:
This change was discussed between engineering and computer science faculty in September 2018 and all parties agreed.

Proposed by: Sarah Lanci

Director of Teacher Education Signature: Yes ☑ No ☐

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Science
Major: Mechanical Engineering Technology

About This Major . . .
The objective of the Mechanical Engineering Technology Program (MET) is to provide the knowledge necessary to apply state-of-the-art techniques to design and build products and systems to meet the current and future needs of society. The Bachelor of Science Degree in Mechanical Engineering Technology is designed for a student who is doer or implementer - one who is able to apply mathematics, the natural and engineering sciences, engineering principles, and current engineering practices to the solution of design problems and to the operation and testing of mechanical systems.

The MET graduate applies established procedures that use current state-of-the-art techniques to work with mechanical systems. Laboratory courses are an integral component of the MET program and are designed to develop student competence to apply experimental design methods, as well as provide a “hands-on” approach to designing and building products and systems to meet the current and future needs of society. The employment of METs in manufacturing related areas should increase as the demand for improved machinery and machine tools grows and industrial machinery and processes become increasingly complex. Emerging technologies in biotechnology, and nanotechnology will create new job opportunities for METs. In addition to job openings from growth, many openings should result from the need to replace workers who leave the labor force.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Apply the knowledge, techniques, skills, and modern tools of engineering to engineering problems. (Critical Thinking/Applied Learning)
2. Apply knowledge of mathematics, science, and technology to engineering problems. (Quantitative Fluency)
3. Effectively use oral, written, and graphical communication skills to address both technical and non-technical audiences. (Communication Fluency)
4. Apply the ethical standards of the discipline to engineering problems. (Specialized Knowledge)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html. If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

2019-20 BS, Mechanical Engineering Technology (3453). Posted:
INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
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- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 126 semester hours for the BS in Mechanical Engineering Technology.
- 2.0 cumulative GPA or higher in coursework toward the major content area.
- A grade of "C" or higher is required in all foundation and major courses.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of "C" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- MATH 135 - Engineering Calculus I (4)
  *3 credits apply to the Essential Learning requirements and 1 credit applies to Foundation Courses.

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- SOCI 120 - Technology and Society (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- PHYS 131 - Fundamental Mechanics (4)
- PHYS 131L - Fundamental Mechanics Laboratory (1)
- CHEM 151 - Engineering Chemistry (4)*
  *2 credits apply to Essential Learning requirements and 2 credits apply to Foundation Courses.

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (13 semester hours, must pass all courses with a grade of "C" or higher.)
- CHEM 151 - Engineering Chemistry (4)*
- CHEM 151L - Engineering Chemistry Laboratory (1)
- MAMT 102 - Introduction to Machine Shop (1)
- MATH 135 - Engineering Calculus I (1)
- MATH 136 - Engineering Calculus II (4)
- MAMT 105 - Print Reading and Sketching (2)
- MAMT 106 - Geometric Tolerancing (2)
  *2 credits apply to Essential Learning requirements and 2 credits apply to Foundation Courses.
BS, MECHANICAL ENGINEERING TECHNOLOGY REQUIREMENTS (76–77 semester hours, must pass all courses with a grade of “C” or higher.)

Basic Engineering Courses (19 semester hours)
- ENGR 101 - Introduction to Engineering (1)
- ENGR 125 - CAD and Fabrication (3)
- ENGR 140 - First-Year Engineering Project (3)
- ENGR 224 - Materials Science (2)
- ENGR 224L - Materials Science Laboratory (1)
- ENGR 225 - Introduction to Manufacturing (3)
- ENGR 261 - Statics and Structures (3)
- ENGR 263 - Mechanics of Solids (3)

MET Courses (36 semester hours)
- ENGR 305 - Engineering Economics and Ethics (2)
- ENGR 312 - Engineering Thermodynamics (3)
- ENGR 317 - Fundamentals of Circuits and Electronics (2)
- ENGR 317L - Fundamentals of Circuits and Electronics Laboratory (1)
- ENGR 321 - Fluid Mechanics (3)
- ENGR 325 - Component Design (3)
- ENGR 343 - Dynamics (3)
- ENGR 345 - Engineering Integration I (3)
- ENGR 385 - Engineering Integration II (3)
- ENGR 401 - Professionalism Seminar (1)
- ENGR 427 - Measurements Laboratory (2)
- ENGR 435 - Industrial Controls (3)
- ENGR 445 - MET Design Project I (3)
- ENGR 446 - Writing for Design Projects (1)
- ENGR 485 - MET Design Project II (3)

Other Required Courses (9–10 semester hours)
- CSCI 130 - Introduction to Engineering Computer Science (3)
- ENGL 325 - Writing for Engineers (3)
- STAT 305 - Statistics and Quality Control for Engineering (3)

Upper Division Engineering Electives (12 semester hours)
Complete 12 semester hours at 300 or 400 level with an ENGR prefix or other course(s) with advisor approval

2019-20 BS, Mechanical Engineering Technology (3453). Posted:
<table>
<thead>
<tr>
<th>SUGGESTED COURSE SEQUENCING</th>
</tr>
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</table>

**Freshman Year, Fall Semester: 16 credits**
- ENGR 101 - Introduction to Engineering (1)
- MATH 135 - Engineering Calculus I (4)
- ENGL 111 - English Composition (3)
- KINE 100 - Health and Wellness (1)
- ENGR 125 - CAD and Fabrication (3)
- MAMT 105 - Print Reading and Sketching (2)
- MAMT 106 - Geometric Tolerancing (2)

**Freshman Year, Spring Semester: 16 credits**
- MATH 136 - Engineering Calculus II (4)
- ENGL 112 - English Composition (3)
- ENGR 140 - First-Year Engineering Project (3)
- MAMT 102 - Introduction to Machine Shop (1)
- PHYS 131 - Fundamental Mechanics (4) with PHYS 131L - Fundamental Mechanics Laboratory (1)

**Sophomore Year, Fall Semester: 16 credits**
- CHEM 151 - Engineering Chemistry (4) with CHEM 151L - Engineering Chemistry Laboratory (1)
- CSCI 130 - Introduction to Engineering Computing (4)
- ENGR 261 - Statics and Structures (3)
- KINA Activity (1)
- Essential Learning - Humanities (3)

**Sophomore Year, Spring Semester: 16 credits**
- SOCI 120 - Technology and Society (3)
- ENGL 325 - Writing for Engineers (3)
- ENGR 224 - Materials Science (2) with ENGR 224L - Materials Science Laboratory (1)
- ENGR 263 - Mechanics of Solids (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**Junior Year, Fall Semester: 17 credits**
- ENGR 225 - Introduction to Manufacturing (3)
- ENGR 305 - Engineering Economics and Ethics (2)
- ENGR 312 - Engineering Thermodynamics (3)
- ENGR 321 - Fluid Mechanics (3)
- STAT 305 - Statistics and Quality Control for Engineering (3)
- ENGR 345 - Engineering Integration I (3)

**Junior Year, Spring Semester: 15 credits**
- ENGR 317 - Circuits and Electronics (2) and ENGR 317L - Circuits and Electronics Laboratory (1)
- ENGR 325 - Component Design (3)
- ENGR 343 - Dynamics (3)
- ENGR 385 - Engineering Integration II (3)
- ENGR Elective (3)

**Senior Year, Fall Semester: 15 credits**
- ENGR 401 - Professionalism Seminar (1)
- ENGR 427 - Measurements Laboratory (2)
- ENGR 445 - MET Design Project I (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - History (3)
- ENGR Elective (3)

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2019-20 BS, Mechanical Engineering Technology (3453). Posts:
Senior Year, Spring Semester: 16 credits

- ENGR Electives (6)
- ENGR 435 - Industrial Controls (3)
- ENGR 446 - Writing for Design Project (1)
- ENGR 485 - MET Design Project II (3)
- Essential Learning - Social/Behavioral Sciences (3)
**Program Modification**

**Mechanical Engineering Technology: 1453**

**Degree Type:** AAS

Revision to program sheet: Yes ☑ No ☐

Description of modification:
Changing CSCI 130 (Introduction to Engineering Computing) from 3 to 4 credit hours. This changes the program-specific required course credits from 43 to 44 and the total hours for degree from 62 to 63.

Justification:
CSCI 130 is required for the Electrical and Computer Engineering (ECE) degree as dictated by ABET accreditation and the CMU/CU Engineering Partnership. This course is being changed from a 3-credit course to a 4-credit course which impacts the AAS Mechanical Engineering Technology program for which CSCI 130 is a required course. This increase in credit hours will allow for the content to be modernized and tailored for the CMU/CU Boulder Partnership Electrical and Computer Engineering degree which results in a minor impact on the AAS MET program. The content in CSCI 130 must give students background knowledge related to scripting (using MATLAB) in addition to a systems language (such as C++).

Note: CSCI 130 (Introduction to Engineering Computing) credits are being modified to align the CMU/CU partnership programs with ABET standards, and that course modification affects this program. This change, however, does not alter this specific program's accreditation alignment.

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☐ No ☑

Discussions with affected departments:
This change was discussed between engineering and computer science faculty in September 2018 and all parties agreed.

Proposed by: Sarah Lanci

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Major . . .
The objective of the Associate of Applied Science (AAS) in Mechanical Engineering Technology (MET) is to provide the knowledge necessary to aid in the design and realization of products and systems to meet the current and future needs of society. Completion of this applied engineering technology program provides graduates with the skills and knowledge for a successful transition to either a career as a mechanical engineering technician or to the Bachelor of Science program in Mechanical Engineering Technology.

The AAS in MET is designed for a student who is a doer or implementer - one who is able to apply mathematics, the natural and engineering sciences, engineering principles, and current engineering practices to the operation and testing of mechanical systems. Laboratory courses are an integral component of the MET program and are designed to develop student competence to apply experimental design methods, as well as provide a “hands-on” approach to building products and systems.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU associate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Apply the knowledge, techniques, skills, and modern tools of engineering to engineering problems. (Critical Thinking/Applied Learning)
2. Apply knowledge of mathematics, science, and technology to engineering problems. (Quantitative Fluency)
3. Effectively use oral, written, and graphical communication skills to address both technical and non-technical audiences. (Communication Fluency)
4. Apply the ethical standards of the discipline to engineering problems. (Specialized Knowledge)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU Associate of Applied Science (AAS) degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 60 semester hours minimum.
- Students must complete a minimum of 15 of the final 30 semester hours of credit at CMU.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 20 semester credit hours for an AAS degree.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 62-63 semester hours total for the AAS, Mechanical Engineering Technology.
- A grade of “C” or higher must be achieved in coursework toward major content area.

ESSENTIAL LEARNING REQUIREMENTS (15 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

Communication (6 semester hours)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours)
- MATH 119 - Pre-Calculus Mathematics (5)
  - 3 credits apply to the Essential Learning requirement and 2 credits apply to Electives.

Social and Behavioral Sciences (3 semester hours)
- SOCI 120 - Technology and Society (3)

History (3 semester hours)
- Select one History (HIST) course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)
AAS: MECHANICAL ENGINEERING TECHNOLOGY REQUIREMENTS (45-44 semester hours, must earn a grade of “C” or better in each course.)

- One of the following options:
  - CHEM 121 - Principles of Chemistry (4) and CHEM 121L - Principles of Chemistry Laboratory (1)
  - CHEM 131 - General Chemistry I (4) and CHEM 131L - General Chemistry I Laboratory (1)
- CSCI 130 - Introduction to Engineering Computer Science (3)
- One of the following courses with lab:
  - PHYS 111 - General Physics (4) and PHYS 111L - General Physics Laboratory (1)
  - PHYS 131 - Fundamental Mechanics (4) and PHYS 131L - Fundamental Mechanics Laboratory (1)
- ENGR 101 - Introduction to Engineering (1)
- ENGR 125 - Computer-Aided Design and Fabrication (3)
- ENGR 140 - First-Year Engineering Projects (3)
- ENGR 261 - Statics and Structures (3)
- MAMT 115 - Introduction to Machine Shop (3)
- MAMT 251 - CNC Machining I (3)
- MAMT 255 - CNC Machining II (3)
- MATH 135 - Engineering Calculus I (4)
- MATH 136 - Engineering Calculus II (4)
- WELD 151 - Introduction to Welding (3)

GENERAL ELECTIVES (2 semester hours)

2 semester hours of college level courses appearing on final transcript, to bring total semester hours to 62.

- MATH 119 - Pre-Calculus Mathematics (2)
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 16 credits
- ENGR 101 - Introduction to Engineering (1)
- MATH 119 - Pre-Calculus Mathematics (5)
- ENGL 111 - English Composition (3)
- ENGR 125 - Computer-Aided Design and Fabrication (3)
- KINE 100 - Health and Wellness (1)
- Select one History (HIST) course (3)

Freshman Year, Spring Semester: 16 credits
- MATH 135 - Engineering Calculus I (4)
- ENGL 112 - English Composition (3)
- ENGR 140 - First-Year Engineering Projects (3)
- MAMT 115 - Introduction to Machine Shop (3)
- WELD 151 - Introduction to Welding (3)

Sophomore Year, Fall Semester: 14 credits
- MATH 136 - Engineering Calculus II (4)
- PHYS 131 - Fundamental Mechanics (4) or PHYS 111 - General Physics (4)
- PHYS 131L - Fundamental Mechanics Laboratory (1) or PHYS 111L - General Physics Laboratory (1)
- CHEM 121 - Principles of Chemistry (4) and CHEM 121L - Principles of Chemistry Laboratory (1) OR CHEM 131 - General Chemistry I (4) and CHEM 131L - General Chemistry I Laboratory (1)

Sophomore Year, Spring Semester: 16-17 credits
- CSCI 130 - Introduction to Engineering Computer Science (3)
- MAMT 251 - CNC Machining I (3)
- MAMT 255 - CNC Machining II (3)
- ENGR 261 - Statics and Structures (3)
- KINA Activity course (1)
- SOCI 120 - Technology and Society (3)
Course Modifications

NURS 353

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
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<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
<td>353</td>
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<td>Credit Hours:</td>
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<td>Course Title:</td>
<td>Foundation of Nursing Practice</td>
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<td>Times for Credit:</td>
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</table>

Prerequisites:

Current: Admission to the BSN program. Foundation courses required. See program sheet for details.

Proposed: Admission to the BSN program.

Requirement or listed choice for any program of study: Yes ☑ No □

Change affects program sheet or grad requirements: Yes ☑ No □

Health Sciences  BSN, Nursing: 3611

Justification:

BSN faculty met fall semester 2018 to evaluate new 4-semester curriculum now that it has been fully implemented. Topical course outline was evaluated for accuracy to course objectives and alignment with the general 4-semester curriculum. This course was streamlined to generalize broad content areas and reduce the number of individual topics.

The prerequisites are being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:

1. National safety patient goals
   a. Articulate role of the Patient Safety Goals on student nurses.
   b. Identify the current NPSG
2. The nursing process
   a. Describe characteristics of a critical thinker.
   b. Discuss critical thinking skills common to nursing practice.
   c. Discuss the relationship of the nursing process to critical thinking.
   d. Explain the relationship of functional health pattern model to nursing.
   e. Describe the use of the nursing process.
   f. Discuss the steps of the nursing process
   g. Differentiate between objective and subjective data.
   h. Differentiate between a nursing diagnosis, medical diagnosis and collaborative problems.
   i. Write accurate nursing diagnostic statements based on nursing assessment.
   j. Define outcome identification and planning.
   k. Formulate a patient plan of care for a patient given a nursing assessment database.
   l. Define implementation and evaluation.
   m. Select appropriate interventions using nursing process.
   n. Explain what evidence based nursing is and its importance.
   o. Compare direct and indirect nursing interventions.
   p. Explain methods for revising or modifying the plan of care.
Course Modifications

3. Safety & Care of the Older Adult
a. Discuss environmental safety requirements to promote health.
b. Describe individual and safety risks based on developmental level.
c. Describe a fall assessment tool
d. Describe a nursing assessment of patient safety.
e. Discuss nursing interventions to maintain patient safety in the older adult population.
f. Explain functional & physiological changes that place older adults at greater risk for health declines.
g. Identify health promotion and maintenance strategies that can give older adults advantages in maintaining optimal health.
h. Discuss the use of restraints.

4. Infection Control
a. Develop a broad understanding of the significance of various types of microorganisms.
b. Identify normal human responses by the body to infection.
c. Discuss actions for breaking the cycle of infection.
d. Describe strategies for implementing Centers for Disease Prevention and Control guidelines for standard and transmission-based precautions.
e. Explain the difference between medical and surgical asepsis.

5. Communication
a. Discuss the elements of the communication process and their relevance to nursing.
b. Explain the nature of the nurse-patient relationship.
c. Identify important assessment areas to address when communication with patients.
d. Provide examples of different types of therapeutic communication techniques.
e. Explain how nontherapeutic responses may interfere with therapeutic communication.

6. Documentation
a. Describe the nurse’s responsibility to maintain confidentiality in regards to patient information.
b. Discuss legal guidelines for documentation.
c. Identify purposes of patient records.
d. Identify flow sheets, plans of care, and critical pathways used in patient records.
e. Describe different methods of charting.
f. Describe the purpose and content of a safe patient handoff.
g. Discuss the importance of timely, accurate communication in healthcare.
h. Understand the use of medical terminology.
i. Describe communication tools such as SBAR that improve organization of communication.

7. Medication Administration
a. Examine the nurse’s role and responsibility in medication administration.
b. Utilize common terms and abbreviations used in prescribing and administering medications.
c. Describe basic pharmacokinetics of medications.
d. Describe medication actions.
e. Discuss rationales for various routes of administration.
f. Identify ways to prevent medication errors - "Six Rights of Medication" & the "Three Checks."
g. Discuss the legal and ethical issues of medication errors.
h. Discuss cultural considerations in administering medications.
i. Explain methods used to educate patients about medications.
j. Describe factors to include in assessing the need for and response to medication.

8. Nutrition
a. Verbalize the terminology and principles of normal nutrition.
b. Describe religious and cultural influences on nutrition.
c. Discuss nursing assessment of nutritional status.
d. Discuss use of therapeutic diets for nutritional support.
e. Differentiate between indications for enteral and parenteral nutrition.
f. Identify complications of enteral nutrition.

9. Patient Education
a. Explain the domains of knowledge and how learning relates to each.
Course Modifications

b. Identify purposes of patient education.
c. Define factors that inhibit and facilitate learning.
d. Discuss important assessment data used to individualize patient teaching.
e. Recognize major factors that affect motivation and health maintenance.

10. Loss and grieving and spirituality
a. Describe phases of grieving from Kubler-Ross.
b. Describe therapeutic communication related to loss, death and grief.
c. Cite coping mechanisms commonly used to handle grief situations.
d. Identify types of grief.
e. Discuss cultural and religious influences on loss, death and grief.
f. Describe nursing management for the dying patient.
g. Describe care of the body after death.
h. Discuss principles of palliative care.
i. Identify methods for nurse self-care in grief and loss.
j. List nursing diagnoses related to death, dying and grieving.
k. Discuss the influence of spiritual practices on the health status of patients.
l. Utilize nursing process in relation to a patient's spirituality.
m. List nursing diagnoses for patients with alterations in spiritual health.

11. Stress and Adaptation
a. Explain the relationship between stressors, responses, and adaptation.
b. Explain how anxiety, fear and anger relate to stress
c. Discuss the inflammatory response: What physiological changes occur?
d. Describe several interventions for preventing or managing stress.

12. Pain
a. Discuss common misconceptions about pain.
b. Identify factors that alter responses to pain.
c. Differentiate among various types of pain.
d. Discuss the correct use of non-pharmacologic pain-relief measures.
e. Identify barriers to effective pain management.
f. Identify proper steps to evaluate a patient’s response to pain interventions.

13. Oxygenation
a. Describe important elements in the respiratory assessment.
b. Identify factors that may interfere with oxygenation of body tissues.
c. Identify clinical signs and symptoms of altered oxygenation.
d. Describe risk factors affecting oxygenation.
e. List three appropriate nursing diagnoses and outcomes for the patient with altered respiratory function.

14. Cardiac Function
a. Discuss factors that contribute to normal cardiac output and tissue perfusion.
b. Discuss cardiovascular changes that occur across the lifespan.
c. Discuss causes of altered cardiovascular function.
d. Describe how cardiovascular function can affect normal activities.
e. Discuss nursing measures directed at promoting and restoring cardiovascular function.

15. Fluid and Electrolytes, acid base balance
a. Identify concepts of the body's regulation of fluid and electrolytes.
b. Describe the regulation and movement of major electrolytes.
c. Describe common disturbances in fluid, electrolyte and acid-base balances.
d. Identify clinical signs and symptoms of alterations in fluid, electrolyte and acid-base balances.
e. Discuss nursing interventions for patients with alterations in fluid, electrolyte and acid-base balances.
f. Identify roles of medications on fluid, electrolyte and acid-base balances.
g. Describe risk factors that influence fluid, electrolyte and acid-base balances.
h. Interpret laboratory findings related to fluid electrolyte and acid-base balances.

16. Urinary and bowel elimination
a. Identify common problems of urinary elimination.
Course Modifications

b. Describe characteristics of normal and abnormal urine.
c. Name normal urinalysis values and other laboratory results that impact the urinary system.
d. Discuss nursing measures to reduce urinary tract infections.
e. List independent and dependent nursing interventions to promote normal urinary elimination.
f. List nursing diagnoses related to alterations in urinary elimination.
g. Utilize knowledge of normal bowel elimination in performing a nursing assessment.
h. Identify common types of alterations in bowel elimination.
i. Identify factors that affect bowel elimination.
j. Discuss nursing care required for patients with a bowel diversion.
k. List independent and dependent nursing interventions to promote normal bowel elimination.
l. List nursing diagnoses related to alterations in bowel elimination.

17. Skin Integrity

a. Define key terms related to skin integrity and wound care.
b. Discuss classification of pressure ulcers and wounds.
c. Describe the process of wound healing.
d. Describe complications of wound healing.
e. Describe factors that impair or promote wound healing.
f. Demonstrate techniques that help prevent and/or manage pressure ulcers.
g. Describe the differences in wounds healing by primary and secondary intention.
h. List appropriate nursing interventions for a client with impaired skin integrity.

18. Vital Signs

a. Describe factors that can lead to variations in temperature, blood pressure, pulse, oxygen saturation and respiration.
b. Discuss physiologic changes that can be associated with fever.
c. Explain the mechanisms of the body’s temperature regulation.
d. Identify nursing measures to promote heat loss or heat conservation.
e. Discuss delegation of vital sign assessment to ancillary personnel.

Topical course outline, proposed:

1. National safety patient goals
2. The nursing process
3. Safety & care of the older adult
4. Infection control
5. Communication
6. Documentation
7. Medication administration
8. Nutrition
9. Patient education
10. Loss, grieving, and spirituality
11. Stress and adaptation
12. Pain
13. Oxygenation
14. Cardiac function
15. Fluid and electrolytes; acid-base balance
16. Urinary and bowel elimination
17. Skin integrity
18. Vital signs
19. Family and culture influence on patient care

Student Learning Outcomes, current:

1. Demonstrate the use of the nursing process in planning and providing care to people across the life span in a variety of settings.
2. Develop a theoretical foundation for essential nursing functions.
3. Develop therapeutic communication skills relating to patients, families and the health care team.
Course Modifications

4. Identify evidenced based care that contributes to safe and quality patient-centered outcomes.
5. Identify safe environments for the patient in a variety of clinical settings.
6. Explore the roles of the nurse in a variety of settings including advocate, teacher, and caregiver.

Student Learning Outcomes, proposed:

Discussions with affected departments:
December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban  Expected Implementation: Fall 2019
Course Modifications

NURS 353L

Intended semester to offer modified course for the 1st time: Fall 2019

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<td>Change affects program sheet or grad requirements:</td>
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Health Sciences  BSN,  Nursing: 3611

Justification:

This is the laboratory component to NURS 353 Foundations in Nursing Practice and the topical course outline is being changed to align with the didactic course. The prerequisites are being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:

1. National safety patient goals
   a. Articulate role of the Patient Safety Goals on student nurses.
   b. Identify the current NPSG
2. The nursing process
   a. Describe characteristics of a critical thinker.
   b. Discuss critical thinking skills common to nursing practice.
   c. Discuss the relationship of the nursing process to critical thinking.
   d. Explain the relationship of functional health pattern model to nursing.
   e. Describe the use of the nursing process.
   f. Discuss the steps of the nursing process
   g. Differentiate between objective and subjective data.
   h. Differentiate between a nursing diagnosis, medical diagnosis and collaborative problems.
   i. Write accurate nursing diagnostic statements based on nursing assessment.
   j. Define outcome identification and planning.
   k. Formulate a patient plan of care for a patient given a nursing assessment database.
   l. Define implementation and evaluation.
   m. Select appropriate interventions using nursing process.
   n. Explain what evidence based nursing is and its importance.
   o. Compare direct and indirect nursing interventions.
   p. Explain methods for revising or modifying the plan of care.
3. Safety & Care of the Older Adult
   a. Discuss environmental safety requirements to promote health.
   b. Describe individual and safety risks based on developmental level.
   c. Describe a fall assessment tool
   d. Describe a nursing assessment of patient safety.
   e. Discuss nursing interventions to maintain patient safety in the older adult population.
   f. Explain functional & physiological changes that place older adults at greater risk for health declines.
Course Modifications

**g.** Identify health promotion and maintenance strategies that can give older adults advantages in maintaining optimal health.

**h.** Discuss the use of restraints.

4. Infection Control

**a.** Develop a broad understanding of the significance of various types of microorganisms.

**b.** Identify normal human responses by the body to infection.

**c.** Discuss actions for breaking the cycle of infection.

**d.** Describe strategies for implementing Centers for Disease Prevention and Control guidelines for standard and transmission-based precautions.

**e.** Explain the difference between medical and surgical asepsis.

5. Communication

**a.** Discuss the elements of the communication process and their relevance to nursing.

**b.** Explain the nature of the nurse-patient relationship.

**c.** Identify important assessment areas to address when communication with patients.

**d.** Provide examples of different types of therapeutic communication techniques.

**e.** Explain how nontherapeutic responses may interfere with therapeutic communication.

6. Documentation

**a.** Describe the nurse's responsibility to maintain confidentiality in regards to patient information.

**b.** Discuss legal guidelines for documentation.

**c.** Identify purposes of patient records.

**d.** Identify flow sheets, plans of care, and critical pathways used in patient records.

**e.** Describe different methods of charting.

**f.** Describe the purpose and content of a safe patient handoff.

**g.** Discuss the importance of timely, accurate communication in healthcare.

**h.** Understand the use of medical terminology.

**i.** Describe communication tools such as SBAR that improve organization of communication.

7. Medication Administration

**a.** Examine the nurse's role and responsibility in medication administration.

**b.** Utilize common terms and abbreviations used in prescribing and administering medications.

**c.** Describe basic pharmacokinetics of medications.

**d.** Describe medication actions.

**e.** Discuss rationales for various routes of administration.

**f.** Identify ways to prevent medication errors - "Six Rights of Medication" & the "Three Checks."

**g.** Discuss the legal and ethical issues of medication errors.

**h.** Discuss cultural considerations in administering medications.

**i.** Explain methods used to educate patients about medications.

**j.** Describe factors to include in assessing the need for and response to medication.

8. Nutrition

**a.** Verbalize the terminology and principles of normal nutrition.

**b.** Describe religious and cultural influences on nutrition.

**c.** Discuss nursing assessment of nutritional status.

**d.** Discuss use of therapeutic diets for nutritional support.

**e.** Differentiate between indications for enteral and parenteral nutrition.

**f.** Identify complications of enteral nutrition.

9. Patient Education

**a.** Explain the domains of knowledge and how learning relates to each.

**b.** Identify purposes of patient education.

**c.** Define factors that inhibit and facilitate learning.

**d.** Discuss important assessment data used to individualize patient teaching.

**e.** Recognize major factors that affect motivation and health maintenance.

10. Loss and grieving and spirituality

**a.** Describe phases of grieving from Kubler-Ross.

**b.** Describe therapeutic communication related to loss, death and grief.
Course Modifications

c. Cite coping mechanisms commonly used to handle grief situations.
d. Identify types of grief.
e. Discuss cultural and religious influences on loss, death and grief.
f. Describe nursing management for the dying patient.
g. Describe care of the body after death.
h. Discuss principles of palliative care.
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l. Utilize nursing process in relation to a patient's spirituality.
m. List nursing diagnoses for patients with alterations in spiritual health.

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a. Explain the relationship between stressors, responses, and adaptation.
b. Explain how anxiety, fear and anger relate to stress.
c. Discuss the inflammatory response: What physiological changes occur?
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a. Discuss common misconceptions about pain.
b. Identify factors that alter responses to pain.
c. Differentiate among various types of pain.
d. Discuss the correct use of non-pharmacologic pain-relief measures.
e. Identify barriers to effective pain management.
f. Identify proper steps to evaluate a patient's response to pain interventions.

13. Oxygenation
a. Describe important elements in the respiratory assessment.
b. Identify factors that may interfere with oxygenation of body tissues.
c. Identify clinical signs and symptoms of altered oxygenation.
d. Describe risk factors affecting oxygenation.
e. List three appropriate nursing diagnoses and outcomes for the patient with altered respiratory function.

14. Cardiac Function
a. Discuss factors that contribute to normal cardiac output and tissue perfusion.
b. Discuss cardiovascular changes that occur across the lifespan.
c. Discuss causes of altered cardiovascular function.
d. Describe how cardiovascular function can affect normal activities.
e. Discuss nursing measures directed at promoting and restoring cardiovascular function.

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a. Identify concepts of the body's regulation of fluid and electrolytes.
b. Describe the regulation and movement of major electrolytes.
c. Describe common disturbances in fluid, electrolyte and acid-base balances.
d. Identify clinical signs and symptoms of alterations in fluid, electrolyte and acid-base balances.
e. Discuss nursing interventions for patients with alterations in fluid, electrolyte and acid-base balances.
f. Identify roles of medications on fluid, electrolyte and acid-base balances.
g. Describe risk factors that influence fluid, electrolyte and acid-base balances.
h. Interpret laboratory findings related to fluid electrolyte and acid-base balances.

16. Urinary and bowel elimination
a. Identify common problems of urinary elimination.
b. Describe characteristics of normal and abnormal urine.
c. Name normal urinalysis values and other laboratory results that impact the urinary system.
d. Discuss nursing measures to reduce urinary tract infections.
e. List independent and dependent nursing interventions to promote normal urinary elimination.
f. List nursing diagnoses related to alterations in urinary elimination.
g. Utilize knowledge of normal bowel elimination in performing a nursing assessment.
h. Identify common types of alterations in bowel elimination.
Course Modifications

i. Identify factors that affect bowel elimination.

j. Discuss nursing care required for patients with a bowel diversion.

k. List independent and dependent nursing interventions to promote normal bowel elimination.

l. List nursing diagnoses related to alterations in bowel elimination.

17. Skin Integrity

a. Define key terms related to skin integrity and wound care.

b. Discuss classification of pressure ulcers and wounds.

c. Describe the process of wound healing.

d. Describe complications of wound healing.

e. Describe factors that impair or promote wound healing.

f. Demonstrate techniques that help prevent and/or manage pressure ulcers.

g. Describe the differences in wounds healing by primary and secondary intention.

h. List appropriate nursing interventions for a client with impaired skin integrity.

18. Vital Signs

a. Describe factors that can lead to variations in temperature, blood pressure, pulse, oxygen saturation and respiration.

b. Discuss physiologic changes that can be associated with fever.

c. Explain the mechanisms of the body's temperature regulation.

d. Identify nursing measures to promote heat loss or heat conservation.

e. Discuss delegation of vital sign assessment to ancillary personnel.

Topical course outline, proposed:

1. National safety patient goals

2. The nursing process

3. Safety & care of the older adult

4. Infection control

5. Communication

6. Documentation

7. Medication administration

8. Nutrition

9. Patient education

10. Loss, grieving, and spirituality

11. Stress and adaptation

12. Pain

13. Oxygenation

14. Cardiac function

15. Fluid and electrolytes; acid-base balance

16. Urinary and bowel elimination

17. Skin integrity

18. Vital signs

19. Family and culture influence on patient care

Student Learning Outcomes, current:

1. Maintain a consistently safe clinical environment.

2. Respond to the unique needs of diversity of individuals when planning nursing care.

3. Demonstrate proficiency in basic psycho-motor nursing skills in a variety of settings.

4. Consistently perform safe medication administration in all clinical settings.

5. Use selected tools for wellness assessment, health risk appraisal and risk reduction in nursing practice.

6. Adopt professional comportment in personal conduct and nursing practice.

7. Accurately documents clinical findings in a variety of settings.

8. Records clear and accurate data in a variety of formats.

Student Learning Outcomes, proposed:

1. Respond to the unique needs of diversity of individuals when planning nursing care.

2. Demonstrate proficiency in basic psycho-motor nursing skills in a variety of settings.
Course Modifications

3. Consistently perform safe medication administration in all clinical settings.
4. Use selected tools for wellness assessment, health risk appraisal and risk reduction in nursing practice.
5. Adopt professional comportment in personal conduct and nursing practice.
6. Accurately documents clinical findings in a variety of settings.
7. Records clear and accurate data in a variety of formats.

Discussions with affected departments:
December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban
Expected Implementation: Fall 2019
# Course Modifications

**NURS 372**  
Intended semester to offer modified course for the 1st time: Fall 2019

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<tr>
<td>Credit Hours:</td>
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<td>Professional Development I: Nursing Theory, Roles, and Ethics</td>
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**Health Sciences**  
**BSN, Nursing: 3611**

**Justification:**  
Revisions made to course content and outcomes following faculty curriculum mapping sessions. Two important concepts (time management and caring concepts) were added to the topical course outline that are important to address as discrete concepts based on nursing science.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

**Topical course outline, current:**  
1. History of Nursing  
2. ANA Code of Ethics and Ethical Issues in Nursing  
3. Nursing Theory and Grand Theorists  
4. Civility in Nursing  
5. Legal Issues in Nursing  
6. Healthcare policies influencing nursing practice, quality and safety  
7. Advocating for patients and the nursing profession  
8. Complementary and Alternative Care  
9. Evidence Based-Practice  

**Topical course outline, proposed:**  
1. History and roles of nursing  
2. American Nurses Association Code of Ethics and ethical issues in nursing  
3. Nursing theory and grand theorists  
4. Civility in nursing  
5. Legal issues in nursing  
6. Healthcare policies influencing nursing practice, quality, and safety  
7. Advocating for patients and the nursing profession  
8. Complementary and alternative care  
9. Evidence based-practice  
10. Time-management strategies and practice  
11. The caring nurse  

**Student Learning Outcomes, current:**  
1. Identify both historical and current issues that have contributed to the development of nursing as a
Course Modifications

1. Explore nursing practice within the domain of ANA Code of Ethics.
2. Explore concepts of selected nursing theory and demonstrate integration of one theorist into practice.
3. Explore the roles and responsibilities of students, nurses, and faculty to create and sustain a culture of respect in education and the workplace.
5. Discuss basic principles of law that affect nursing practice.
6. Discuss how the Nurse Practice Act provides a foundation for nursing practice.
7. Explore the concept of caring as a nurse.
8. Develop a beginning understanding of evidence-based practice.

Student Learning Outcomes, proposed:

1. Identify both historical and current issues that have contributed to the development of nursing as a profession.
2. Explore nursing practice within the domain of the ANA Code of Ethics.
3. Explore concepts of selected nursing theory and demonstrate integration of one theorist into practice.
4. Explore the roles and responsibilities of students, nurses, and faculty to create and sustain a culture of respect in education and the workplace.
5. Identify key concepts of ANA Social Policy Statement.
6. Discuss basic principles of law that affect nursing practice.
7. Discuss how the Nurse Practice Act provides a foundation for nursing practice.
8. Explore the concept of caring as a nurse.
9. Explore the role of complementary and alternative therapy.
10. Define evidence-based practice.

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban

Expected Implementation: Fall 2019
Course Modifications

NURS 373

Intended semester to offer modified course for the 1st time: Fall 2019

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Health Sciences  BSN,  Nursing: 3611

Justification:

A curriculum mapping session that involved all BSN faculty in December 2018 identified the need to update the course objectives and outline for both Acute and Chronic I & II so they aligned, covered all relevant content, but were more streamlined and provided necessary emphasis on topics introduced in earlier courses. No content was deleted and all content was incorporated into the proposed topical course outline.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:

1. Ethical/legal concepts
2. Health disparities
3. Review of behaviors that promote and maintain health
4. Pain management
5. Cell injury and inflammation
6. HIV-AIDS
7. Management of diabetes mellitus (scheduling of this topic dependent on availability of speaker)
8. Management of patient with skin disorders
9. Non-melanoma skin cancers
10. Malignant melanoma
11. Management of patient with musculoskeletal system disorder
12. Systemic lupus erythematosus
13. Osteoarthritis
14. Rheumatoid arthritis
15. Management of patient with neurological system disorder
16. Problems with oxygen-ventilation
17. Influenza
18. Pleural effusion
19. Problems associated with the transport/ hematologic system
20. Management of patient with cancer
21. Problems with perfusion-vascular disorders
22. Venous thrombotic disorders
23. Management of patient with problems of ingestion, digestion, absorption, elimination
24. Management of patient with eye and ear disorders
Course Modifications

25. Management of patient with problems of regulatory mechanisms
26. Hyperthyroidism
27. Hypothyroidism
28. Hypoparathyroidism
29. Disorder of adrenal gland

Topical course outline, proposed:
1. Concepts of health, illness and wellness in care of the older adult
2. Pathologic mechanism of disease in the adult client
3. Care of patients with problems related to movement and coordination
4. Care of patients with problems related to upper and lower airway
5. Care of patients with problems related to oxygen transport and perfusion
6. Care of patients with problems related to cancer
7. Care of patients with problems related to ingestion, digestion, absorption and elimination
8. Care of patients with problems related to hepato-biliary system
9. Care of patients with problems related to urinary-renal system
10. Care of patients with problems related to regulatory mechanisms

Student Learning Outcomes, current:
1. Examine the impact of acute and chronic illness on the biological, psychological, social, cultural, and spiritual subsystems when caring for the adult patient.
2. Apply the nursing process, recognizing patient/surrogate autonomy, in the care and management of patients experiencing common alterations in the subsystems.
3. Utilize ethical/legal decision-making in the delivery of culturally sensitive care to adult patients.
4. Investigate common problems/conditions encountered in the care of adult patients.
5. Demonstrate basic nursing care skills focusing on patient safety, including skill in history taking, physical examination and safe drug administration in the care of the adult patient.
6. Employ effective communication skills in the dissemination of information about the patient to appropriate health team members, appropriately utilizing select healthcare informatics.
7. Function as a patient advocate, demonstrating respect for differing viewpoints, through interaction with all health team members in the delivery of nursing care.
8. Demonstrate effective skills reflecting cultural sensitivity in the delivery of care to a diverse population of patients.
9. Utilize applied research findings and evidence-based practices in the promotion of wellness and the prevention of illness for patients in institutional and community settings.
10. Demonstrate commitment to safety, competence, caring, and life-long learning.

Student Learning Outcomes, proposed:
1. Examine the impact of acute and chronic illness on the biological, psychological, social, cultural, and spiritual subsystems when caring for the adult patient.
2. Apply the nursing process in the care and management of adult clients experiencing common alterations in the subsystems.
3. Deliver culturally sensitive care to adult patients from diverse backgrounds.
4. Investigate unique challenges encountered in the care of vulnerable adult populations.
5. Employ effective communication skills while collaborating with multi-disciplinary team members in the acute care setting.
6. Promote and implement effective client education related to acute and chronic illness.
7. Utilize evidence-based practices in the promotion of wellness, the prevention of illness, and the management of care for adult patients.
8. Explore the roles of the professional nurse emphasizing factors that promote caring, advocacy, patient safety, and quality of care.

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.
Course Modifications

Proposed by:  Karen Urban

Expected Implementation:  Fall 2019
Course Modifications

NURS 373L

Intended semester to offer modified course for the 1st time: Fall 2019

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<td>3611</td>
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Justification:

Topical content updated to align with didactic course, NURS 373 Acute and Chronic I. Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:
1. Ethical/legal concepts
2. Health disparities
3. Review of behaviors that promote and maintain health
4. Pain management
5. Cell injury and inflammation
6. HIV-AIDS
7. Management of diabetes mellitus (scheduling of this topic dependent on availability of speaker)
8. Management of patient with skin disorders
9. Non-melanoma skin cancers
10. Malignant melanoma
11. Management of patient with musculoskeletal system disorder
12. Systemic lupus erythematosus
13. Osteoarthritis
14. Rheumatoid arthritis
15. Management of patient with neurological system disorder
16. Problems with oxygen-ventilation
17. Influenza
18. Pleural effusion
19. Problems associated with the transport/ hematologic system
20. Management of patient with cancer
21. Problems with perfusion-vascular disorders
22. Venous thrombotic disorders
23. Management of patient with problems of ingestion, digestion, absorption, elimination
24. Management of patient with eye and ear disorders
25. Management of patient with problems of regulatory mechanisms
26. Hyperthyroidism
27. Hypothyroidism
28. Hypoparathyroidism
Course Modifications

29. Disorder of adrenal gland

Topical course outline, proposed:
1. Concepts of health, illness and wellness in care of the older adult
2. Pathologic mechanism of disease in the adult client
3. Care of patients with problems related to movement and coordination
4. Care of patients with problems related to upper and lower airway
5. Care of patients with problems related to oxygen transport and perfusion
6. Care of patients with problems related to cancer
7. Care of patients with problems related to ingestion, digestion, absorption and elimination
8. Care of patients with problems related to hepato-biliary system
9. Care of patients with problems related to urinary-renal system
10. Care of patients with problems related to regulatory mechanisms

Student Learning Outcomes, current:
1. Provide safe and competent nursing care to all patients relying on knowledge, skills and resources.
2. Apply the nursing process to individuals from the young adult through the geriatric population.
3. Demonstrate clinical reasoning skills in individualizing nursing care to diverse populations.
4. Practice according to professional ethics and guiding principles and standards.
5. Develop awareness of the multiple roles of today's nurse: caregiver, educator, and advocate.
6. Recognize the multi-disciplinary approach to nursing care.
7. Demonstrate knowledge and skills related to nursing informatics.

Student Learning Outcomes, proposed:
1. Provide safe and competent nursing care to adult clients relying on knowledge, skills, attitudes, and resources.
2. Apply the nursing process to individuals from the young adult through the geriatric population.
3. Demonstrate clinical reasoning skills in individualizing nursing care to diverse populations experiencing acute and chronic illness.
4. Practice nursing according to professional ethics and guiding principles and standards.
5. Collaborate with healthcare professionals and clients to maximize health promotion and disease/injury prevention interventions.
7. Demonstrate commitment to safety, competence, caring, and lifelong learning.

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban

Expected Implementation: Fall 2019
Course Modifications

NURS 388

Intended semester to offer modified course for the 1st time: Fall 2019

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Health Sciences   BSN,   Nursing:  3611

Justification:
Changes made to #7 on the topical outline to better describe the content, following a faculty curriculum mapping session December 2018. Our accrediting body wants to see specific language addressing mental health across the life span.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar’s office.

Topical course outline, current:
1. Mental Health/Mental Illness Concepts
2. Alterations in Mental Health
3. Psychobiology in Mental Health/Illness
4. Ethical & Legal Issues
5. Cultural & Spiritual Concepts
6. Therapeutic Communication
7. Childhood, Adolescent and Family Mental Health Issues
8. Psychopharmacology Review
9. Mental Health Therapies
10. Concepts of Care and EBP in Mental Health
11. Population-specific Mental Health Care

Topical course outline, proposed:
1. Mental health/mental illness concepts
2. Alterations in mental health
3. Psychobiology in mental health/illness
4. Ethical & legal issues
5. Cultural & spiritual concepts
6. Therapeutic communication
7. Childhood, adolescent, adult, older adult, and family mental health issues
8. Psychopharmacology review
9. Mental health therapies
10. Concepts of care and EBP in mental health
11. Population-specific mental health care

Student Learning Outcomes, current:
Course Modifications

1. Relate the neurobiological and psychosocial influences to the clinical manifestations of specific mental illnesses and disturbances.
2. Describe the clinical manifestations of specific mental illnesses and disturbances of psychosocial integrity.
3. Analyze the impact of psychosocial stressors which affect client and family systems' stability throughout the life span.
4. Utilize research and theory in the care of mental health clients.
5. Define the role of the nurse in relation to professional practice issues in psychiatric mental health care.
6. Demonstrate commitment to the values of caring, competence, and life-long learning.

Student Learning Outcomes, proposed:

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban  Expected Implementation: Fall 2019
**Course Modifications**

NURS 388L

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Health Sciences  BSN,  Nursing: 3611

**Justification:**

Topical content outline for the laboratory course for NURS 388 Mental Health Nursing is being aligned with didactic course.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar’s office.

**Topical course outline, current:**

1. Mental Health/Mental Illness Concepts
2. Alterations in Mental Health
3. Psychobiology in Mental Health/Illness
4. Ethical & Legal Issues
5. Cultural & Spiritual Concepts
6. Therapeutic Communication
7. Childhood, Adolescent and Family Mental Health Issues
8. Psychopharmacology Review
9. Mental Health Therapies
10. Concepts of Care and EBP in Mental Health
11. Population-specific Mental Health Care

**Topical course outline, proposed:**

1. Mental health/mental illness concepts
2. Alterations in mental health
3. Psychobiology in mental health/illness
4. Ethical & legal issues
5. Cultural & spiritual concepts
6. Therapeutic communication
7. Childhood, adolescent, adult, older adult, and family mental health issues
8. Psychopharmacology review
9. Mental health therapies
10. Concepts of care and EBP in mental health
11. Population-specific mental health care

**Student Learning Outcomes, current:**

1. Relate the neurobiological and psychosocial influences to the clinical manifestations of specific mental
Course Modifications

illnesses and disturbances.
2. Describe the clinical manifestations of specific mental illnesses and disturbances of psychosocial integrity.
3. Analyze the impact of psychosocial stressors which affect client and family systems' stability throughout the life span.
4. Utilize research and theory in the care of mental health clients.
5. Define the role of the nurse in relation to professional practice issues in psychiatric mental health care.
6. Demonstrate commitment to the values of caring, competence, and life-long learning.

Student Learning Outcomes, proposed:

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by:  Karen Urban          Expected Implementation:  Fall 2019
Course Modifications

NURS 394

Intended semester to offer modified course for the 1st time: Fall 2019

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Health Sciences  BSN,  Nursing: 3611

Justification:
Minor update of current content after faculty curriculum mapping sessions. Updating topical course outline #11 allows for better support of that content area through updated assignments. Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:
1. Introduction to Nursing Research
2. Ethical Concerns in Research
3. Research Problems, Purposes, and Hypotheses
4. Literature Review
5. Organizing Framework: Conceptual and Theoretical Frameworks and Designs
6. Populations and Samples
7. Measurement and Data Collection
8. Analysis of Research Data
9. Critiquing and Utilization of Nursing Research
10. Research in Evidence Based Nursing (EBN) Practice
11. Presentation of evidence and recommendations for evidence-based practice in a cogent manner via written and verbal communication.

Topical course outline, proposed:
1. Introduction to nursing research
2. Ethical concerns in research
3. Research problems, purposes, and hypotheses
4. Literature review process
5. Organizing framework: Conceptual and theoretical frameworks and designs
6. Populations and samples
7. Measurement and data collection
8. Analysis of research data
9. Critique and utilization of nursing research
10. Research in evidence-based nursing (EBN) practice
11. Written and verbal communication of evidence-based practice recommendations for clinical nursing practice
Course Modifications

Student Learning Outcomes, current:
1. Analyze the similarities and differences between the nursing process and the scientific method and research process.
2. Develop a research question related to a clinical nursing practice.
3. Conduct a literature review related to the selected research topic.
4. Relate a theoretical framework to the selected evidence-based practice topic and question.
5. Examine major types of research methodologies.
6. Utilize electronic communication to search data bases and disseminate findings.
7. Critique quantitative and qualitative nursing research.
8. Critique the relevance of nursing research studies in promoting the health and adaptation of clients.
9. Develop an appreciation of the ethical considerations in evidence-based research.
10. Apply research concepts in the development of an evidence-based proposal for acceptance or change in the clinical nursing practice.
11. Present evidence and recommendations for evidence-based practice related to their proposal in a power point presentation to peers, RNs, and educators.

Student Learning Outcomes, proposed:
1. Analyze the similarities and differences between the nursing process, scientific method, and the research process.
2. Conduct a literature review related to a selected research topic.
3. Understand theoretical and conceptual frameworks for application in research.
4. Examine major types of research methodologies.
5. Critique quantitative and qualitative nursing research.
6. Apply nursing research for utilization in clinical practice.

Discussions with affected departments:
December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban
Expected Implementation: Fall 2019
Course Modifications

NURS 472

Intended semester to offer modified course for the 1st time: Fall 2019

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Current: Admission to the BSN program. Foundation courses required. See program sheet for details.

Proposed: Admission to the BSN program.

Requirement or listed choice for any program of study: Yes ☑ No ☐
Change affects program sheet or grad requirements: Yes ☑ No ☐

Health Sciences  BSN,  Nursing:  3611

Justification:

BSN faculty met December 2018 to review all courses. Curriculum mapping revealed that some content from this class was being covered in other nursing courses. In an effort to reduce duplicative content, instructors can reduce detail under each proposed topical outline. Thus, credits can be reduced in this course (NURS 472 Professional Development II: Health Informatics) from three to two. Content in this course related to topical course outline areas "Choosing a system" and "future directions" fit better in NURS 490, Nursing Leadership and Management, and will be moved to that course.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:

1. Introduction to Health Informatics.
2. Information Systems in Healthcare Delivery
3. Choosing a System
4. Healthcare Informatics and the consumer
5. Quality and Standards in Informatics
6. Privacy, confidentiality, & security
7. Legal Issues and Regulations for Informatics
8. Future Directions

Topical course outline, proposed:

1. Introduction to health informatics
2. Information systems in healthcare delivery
3. Healthcare informatics and the consumer
4. Quality and standards in informatics
Course Modifications

5. Privacy, confidentiality, and security
6. Legal issues and regulations for informatics
7. Emerging technologies

Student Learning Outcomes, current:
1. Describe the development of health informatics as a discipline, profession, and specialty.
2. Identify the impact of health information technology on consumer health.
3. Evaluate affect of electronic health records on health care organizations.
4. Describe the use of information technologies in patient care delivery, quality, safety, clinical outcomes management, and public health/population management.
5. Explain the privacy, confidentiality, and security issues related to health information technology (HIT).
6. Examine emerging technologies and future trends in HIT.

Student Learning Outcomes, proposed:

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban
Expected Implementation: Fall 2019
Course Modifications

NURS 473

Intended semester to offer modified course for the 1st time: Fall 2019

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<td>Credit Hours:</td>
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Justification:

A curriculum mapping session that occurred in December 2018 identified the need to update the course objectives and outline for Acute and Chronic II. Content topics were broken down into more specific topics as outlined below with the additional topics to include introduction to critical care and critical care pharmacology.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:

1. Stress Response
2. Cardiac Rhythms
3. Fluids & Electrolytes, Acid-Base Imbalances
4. Shock Syndromes
5. Altered Coagulation
6. Respiratory Concepts
7. Cardiac Concepts
8. Neurologic Concepts
9. Biliary Concepts
10. Renal Concepts
11. Organ Transplantation/Death and dying
12. Burn Care
13. Multiple Trauma

Topical course outline, proposed:

1. Introduction to critical care
2. Stress response
3. Shock syndromes
4. Critical care pharmacology
5. Altered coagulations
6. Acid-base imbalances
7. Respiratory concepts
8. Cardiac rhythms
9. Acute coronary syndrome
10. Valvular diseases/disorders
Course Modifications

1. Utilize the nursing process to maximize stability with selected clients.
2. Demonstrate competence in the delivery of selected advanced nursing skills.
3. Participate in client and family education in an effective manner about critical conditions in an effective manner.
4. Collaborate with clients, families, and interdisciplinary health teams to provide optimal care.
5. Analyze the impact of stressors, which affect client and family systems stability in critical care situations.
6. Formulate potential research questions based on literature review and clinical observation.
7. Define the role of the nurse in relation to professional practice issues in complex critical care settings.
8. Promote and implement effective client and family education related to acute and critical conditions.
9. Deliver culturally sensitive care to clients and families experiencing complex/critical alterations in their health.
10. Function as a patient advocate and investigate unique challenges encountered in the care of a complex and/or critically ill client.
11. Define the role of the nurse in relation to professional practice issues in complex critical care settings.
12. Demonstrate commitment to safety, competence, caring, and life-long learning.

Student Learning Outcomes, current:
1. Utilize the nursing process to maximize stability with selected clients.
2. Demonstrate competence in the delivery of selected advanced nursing skills.
3. Participate in client and family education in an effective manner about critical conditions in an effective manner.
4. Collaborate with clients, families, and interdisciplinary health teams to provide optimal care.
5. Analyze the impact of stressors, which affect client and family systems stability in critical care situations.
6. Formulate potential research questions based on literature review and clinical observation.
7. Define the role of the nurse in relation to professional practice issues in complex critical care settings.

Student Learning Outcomes, proposed:
1. Utilize the nursing process to maximize stability of acutely ill clients.
2. Analyze the impact of stressors which affect the client and family systems' stability in critical care situations.
3. Collaborate with clients, families, and interdisciplinary health teams to provide optimal care.
4. Formulate potential research questions based on literature review and clinical observation.
5. Promote and implement effective client and family education related to acute and critical conditions.
6. Deliver culturally sensitive care to clients and families experiencing complex/critical alterations in their health.
7. Function as a patient advocate and investigate unique challenges encountered in the care of a complex and/or critically ill client.
8. Define the role of the nurse in relation to professional practice issues in complex critical care settings.
9. Demonstrate commitment to safety, competence, caring, and life-long learning.

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban

Expected Implementation: Fall 2019
Course Modifications

NURS 473L

Intended semester to offer modified course for the 1st time: Fall 2019

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Health Sciences  BSN,  Nursing: 3611

Justification:
Topical course outline being changed to align with didactic course, NURS 473 Acute and Chronic Illness II.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:
1. Stress Response
2. Cardiac Rhythms
3. Fluids & Electrolytes, Acid-Base Imbalances
4. Shock Syndromes
5. Altered Coagulation
6. Respiratory Concepts
7. Cardiac Concepts
8. Neurologic Concepts
9. Biliary Concepts
10. Renal Concepts
11. Organ Transplantation/Death and dying
12. Burn Care
13. Multiple Trauma

Topical course outline, proposed:
1. Introduction to critical care
2. Stress response
3. Shock syndromes
4. Critical care pharmacology
5. Altered coagulations
6. Acid-base imbalances
7. Respiratory concepts
8. Cardiac rhythms
9. Acute coronary syndrome
10. Valvular diseases/disorders
11. Dissections/aneurysms
12. Fluids & electrolytes
13. Diabetic Ketoacidosis/ Hyperosmolar Hyperglycemic Syndrome
Course Modifications

14. Liver concepts
15. Biliary/pancreatic concepts
16. Renal concepts
17. Multi-trauma concepts
18. Burn care
19. Head injuries/Intracranial Pressure
20. Spinal cord Injuries
21. Ethical issues

Student Learning Outcomes, current:
1. Demonstrate competence in the delivery of selected advanced nursing skills.
2. Participate in client and family education of the acute and critical illness at the bedside.
3. Collaborate with clients, families, and interdisciplinary health teams to provide continuity of care at the bedside.
4. Analyze the impact of stressors, which affect client and family systems stability in complex care situations.
5. Utilize safe patient care interventions as outlined in the Institute for Health Care Improvement's prevention.

Student Learning Outcomes, proposed:
1. Demonstrate competence in the delivery of selected advanced nursing skills.
2. Participate in client and family education of the acute and critical illness at the bedside.
3. Collaborate with clients, families, and interdisciplinary health teams to provide continuity of care at the bedside.
4. Analyze the impact of stressors, which affect client and family systems stability in complex care situations.
5. Utilize safe patient care interventions as outlined in the Institute for Health Care Improvement's prevention.
6. Demonstrate commitment to safety, competence, caring and life-long learning.

Discussions with affected departments:
December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban          Expected Implementation: Fall 2019
Course Modifications

NURS 482

Intended semester to offer modified course for the 1st time: Fall 2019

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Health Sciences  BSN, Nursing: 3611

Justification:
The new BSN curriculum was evaluated by faculty December 2018. Topical course content for this course was streamlined while retaining relevant and current concepts.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:
1. NCLEX
2. Licensing
3. Transitions
4. Resumes
5. Portfolios
6. Interviewing
7. Liability
8. Quality & Safety (emphasized)
9. Delegation & Scope of practice
10. Navigating Change: Transitions in practice
11. Professional Growth & Development
12. Communication
13. Healthcare Systems
14. Quality Improvement
15. Patient Outcomes
16. Financial Stability
17. Legislative Advocacy

Topical course outline, proposed:
1. NCLEX
2. Licensing
3. Resumes
4. Professional portfolios
5. Liability
6. Transitions in practice
7. Professional growth & development
Course Modifications

8. Healthcare systems
9. Quality improvement
10. Legislative advocacy

Student Learning Outcomes, current:
1. Explore common transitions to professional practice topics such as NCLEX, licensure, resumes, portfolios, and interviewing.
2. Explore different healthcare systems from a patient centered care perspective.
3. Explore different healthcare systems from a financial perspective.
4. Explore quality improvement initiatives within a variety healthcare systems.
5. Explore the hospital consumer assessment of healthcare providers and systems (HCAHPS) initiative.
6. Identify opportunities for professional growth and development.
7. Explore the role of the advanced practice nurse in different health care delivery settings.
8. Identify strategies for using expertise as a nurse to influence policy within different levels of government.
9. Explore current legislative issues related to healthcare and/or specific to nursing.
10. Identify communication tools useful for managing change in healthcare organizations.
11. Explore different change theories and identify strategies for preparing for change in different healthcare systems.

Student Learning Outcomes, proposed:
1. Examine common transitions to professional practice topics such as NCLEX, licensure, resumes, portfolios, and interviewing.
2. Examine different healthcare systems from a patient-centered care and financial perspective.
3. Identify opportunities for professional growth and development.
4. Recognize and examine the role of the advanced practice nurse in different health care delivery settings.
5. Identify strategies for using expertise as a nurse to influence policy within different levels of government.
6. Investigate current legislative issues related to healthcare and/or nursing.

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban

Expected Implementation: Fall 2019
Course Modifications

NURS 487

Intended semester to offer modified course for the 1st time: Fall 2019

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<td>Health Sciences</td>
<td>BSN, Nursing: 3611</td>
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Justification:
The new BSN curriculum was evaluated by faculty in December 2018. Topical content was assessed and broadened to allow evolution of course specifics as new evidence emerges without affecting topical course outlines. Community assessment, Assessment of the individuals and families in the community, and Population assessment now are covered in the topic Community and population assessment. The two Ethics topics are combined into one. Health promotion and disease prevention now includes the old topics of Preventive health, Screening tests, and Risk calculation and interpretation. Nursing care in the public, community, & outpatient settings now includes Case management and transitions of care and Payor sources for community services. A broad topic called Public health nursing & systems was missing from the old topical course outline and lays the foundation for the rest of the course.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:
Community assessment (windshield survey, etc.)
Assessment of individuals and families in the community
Population assessment
Determinants of health
Vulnerable populations
Global health
Mass casualty response and emergency management
Case management and transitions of care
Ethics as applied in the community
Ethics as applied in populations' research
Epidemiologic methods
Preventive health
Screening tests (preventive health) vs. diagnostic tests (illness)
Risk calculation and interpretation
Hospice & palliative care
Payor sources for community services
Topical course outline, proposed:
Public health nursing & systems
Health policy
Course Modifications

Health promotion and disease prevention
Community & population health assessment
Social determinants of health
Vulnerable populations
Global health
Mass casualty response and emergency management
Ethical reasoning in the community and population nursing
Epidemiologic methods
Nursing care in the public, community, & outpatient settings
Hospice & palliative care

Student Learning Outcomes, current:
1. Describe the legal, ethical and economic issues affecting community health nursing and population practice.
2. Utilize ethical frameworks to reason through difficult issues that arise in community care.
3. List "protective and predictive factors that influence the health of groups, communities and populations." (AACN, 2008)
4. Explore these determinants of health.
5. Explain appropriate clinical judgment and decision-making skills required in "timely nursing care during disasters, mass casualty, and other emergency situations." (AACN, 2008).
7. Describe different roles and models of care for microsystems and macrosystems in the community.
8. Summarize the differences between palliative care and hospice and explain the role each may play in the care of community clients and populations.
9. List factors that contribute to complexity and error in transitions of care and explain strategies for providing better continuity through these transitions

Student Learning Outcomes, proposed:
1. Describe the legal, ethical, political, and economic issues affecting community health nursing and population practice.
2. Utilize ethical frameworks to reason through difficult issues that arise in community care.
3. Describe factors that influence the health of groups and populations locally, nationally, and globally.
4. Explore social determinants of health.
5. Explain appropriate clinical judgment and decision-making skills required in disaster preparedness.
7. Describe different roles and models of care in community and population nursing.
8. Analyze the roles of palliative care and hospice nursing and explain the role each may play in the care of community clients and populations.

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban
Expected Implementation: Fall 2019
Course Modifications

NURS 487L

Intended semester to offer modified course for the 1st time: Fall 2019

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Current: Admission to the BSN program. Foundation courses required. See program sheet for details.

Proposed: Admission to the BSN program.

Requirement or listed choice for any program of study: Yes ☑ No ☐
Change affects program sheet or grad requirements: Yes ☑ No ☐

Health Sciences BSN, Nursing: 3611

Justification:
Modification of the lecture course necessitates modification of the associated laboratory component for NURS 487.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar’s office.

Topical course outline, current:
Community assessment (windshield survey, etc.)
Assessment of individuals and families in the community
Population assessment
Determinants of health
Vulnerable populations
Global health
Mass casualty response and emergency management
Case management and transitions of care
Ethics as applied in the community
Ethics as applied in populations' research
Epidemiologic methods
Preventive health
Screening tests (preventive health) vs. diagnostic tests (illness)
Risk calculation and interpretation
Hospice & palliative care
Payor sources for community services

Topical course outline, proposed:
Public health nursing & systems
Health policy
Health promotion and disease prevention
Community & population health assessment
Social determinants of health
Vulnerable populations
Global health
Mass casualty response and emergency management
Course Modifications

Ethical reasoning in the community and population nursing
Epidemiologic methods
Nursing care in the public, community, & outpatient settings
Hospice & palliative care

Student Learning Outcomes, current:
1. Describe the legal, ethical and economic issues affecting community health nursing and population practice.
2. Utilize ethical frameworks to reason through difficult issues that arise in community care.
3. List "protective and predictive factors that influence the health of groups, communities and populations." (AACN, 2008)
4. Explore these determinants of health.
5. Explain appropriate clinical judgment and decision-making skills required in "timely nursing care during disasters, mass casualty, and other emergency situations." (AACN, 2008).
7. Describe different roles and models of care for microsystems and macrosystems in the community.
8. Summarize the differences between palliative care and hospice and explain the role each may play in the care of community clients and populations.
9. List factors that contribute to complexity and error in transitions of care and explain strategies for providing better continuity through these transitions

Student Learning Outcomes, proposed:
1. Describe the legal, ethical, political, and economic issues affecting community health nursing and population practice.
2. Utilize ethical frameworks to reason through difficult issues that arise in community care.
3. Describe factors that influence the health of groups and populations locally, nationally, and globally.
4. Explore social determinants of health.
5. Explain appropriate clinical judgment and decision-making skills required in disaster preparedness.
7. Describe different roles and models of care in community and population nursing.
8. Analyze the roles of palliative care and hospice nursing and explain the role each may play in the care of community clients and populations.

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Lucy Graham
Expected Implementation: Fall 2019
Course Modifications

NURS 490

Intended semester to offer modified course for the 1st time: Fall 2019

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<td>Current: Exploration of nurses functioning in leadership and management capacity and plans for entry into practice. Application of components of leadership to the delivery of care and the role of the nurse in shaping the future of health care. Examination of trends and issues impacting nursing and the future of health care delivery systems.</td>
<td>Proposed: Exploration of leadership and management theories for application and entry into practice. Examination of nurse leaders and managers as change agents, personal leadership styles, trends and issues, and leadership strategies in local, state, and/or national practice settings for culturally diverse populations.</td>
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Health Sciences  BSN,  Nursing: 3611

Justification:

Current content was updated based on recent curriculum mapping sessions with faculty and current evidence in the nursing discipline related to leadership and management. The course has leadership content but not enough management content. The additional content warranted a change from 2 to 3 credits. The topical course outlines were broadened to allow the course to evolve with new evidence while still adhering to the content outline. Specific course assignments and content were added that falls under the broader content outlined in #1-#8 in 3b below, which increased the course contact time from a 2-credit course to a 3-credit course. Additionally, content related to nurses as leaders, professional communication, and collaboration has been removed from NURS 472, Professional Development II: Health Informatics and added to this course.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar’s office.

Topical course outline, current:

1. Core concepts in leadership & management
2. Decision making and problem solving
Course Modifications

3. Organizational structures & healthcare systems
4. Managing resources
5. Interpersonal/personal communication
6. Incivility, Bullying and Workplace Violence
7. Quality and safety in health care delivery
8. Scope of practice
9. Professional associations and certification

Topical course outline, proposed:

1. Leadership and management theories
2. Change agents and strategies
3. Communication and collaboration
4. Nurse's role in leadership and management
5. Leadership and management styles
6. Issues and trends in nursing leadership
7. Leadership influence in shaping the future of nursing

Student Learning Outcomes, current:

1. Explore leadership and management concepts as a foundation for safe, high quality nursing.
2. Explore the role of nursing leadership as a change agent in shaping the future of healthcare.
3. Explore strategies for improving outcomes of care for culturally diverse populations.
4. Explore topics of resource management including nurse patient ratios, 12 hour shifts, and magnet status.
5. Explore topics of patient safety as it relates to alarm fatigue, staffing, delegation, and scope of practice.
6. Examine the complexity of health care delivery systems responding to health care reform measures, policy, and guidelines.
7. Explore the concepts of communication, inter-professional teams, and the socialization process as they are reflected in the practice and image of professional nursing.
9. Recognize the value of local, state, and national professional associations and certifications for the professional nurse.

Student Learning Outcomes, proposed:

1. Examine leadership and management theories as a foundation for safe, high quality nursing.
2. Discover the role of nursing leadership as a change agent to shape the future of healthcare.
3. Present leadership and/or management strategies related to trends and issues in nursing.
4. Develop a personal leadership and/or management style for application in the practice of nursing.
5. Examine leadership and management strategies for culturally diverse populations.
6. Discover local, state, and/or national practice engagements for the professional nurse.

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban

Expected Implementation: Fall 2019
Course Modifications

NURS 490L

Intended semester to offer modified course for the 1st time: Fall 2019

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<td>Times for Credit: 1</td>
<td>1</td>
</tr>
<tr>
<td>Prerequisites: Current: Admission to the BSN program. Foundation courses required. See program sheet for details. Proposed: Admission to the BSN program.</td>
<td></td>
</tr>
</tbody>
</table>

Description for catalog:

Current: Exploration of nurses functioning in leadership and management capacity and plans for entry into practice. Application of components of leadership to the delivery of care and the role of the nurse in shaping the future of health care. Examination of trends and issues impacting nursing and the future of health care delivery systems.

Proposed: Exploration of leadership and management theories for application and entry into practice. Examination of nurse leaders and managers as change agents, personal leadership styles, trends and issues, and leadership strategies in local, state, and/or national practice settings for culturally diverse populations.

Requirement or listed choice for any program of study: Yes ☑ No □
Change affects program sheet or grad requirements: Yes ☑ No □

Health Sciences BSN, Nursing: 3611

Justification:

Updated content based on recent curriculum mapping sessions with faculty and current evidence. No change to credit hours just updated topical content. Laboratory component of NURS 490. Topical course outline categories broadened to more accurately reflect goals of the course and allow for evolution of course and assignments while allowing for content to stay up-to-date.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:
1. Core concepts in leadership & management
2. Decision making and problem solving
3. Organizational structures & healthcare systems
4. Managing resources
5. Interpersonal/personal communication
6. Incivility, Bullying and Workplace Violence
7. Quality and safety in health care delivery
8. Scope of practice
9. Professional associations and certification

Topical course outline, proposed:
1. Leadership and management theories
2. Change agents and strategies
Course Modifications

1. Explore leadership and management concepts as a foundation for safe, high quality nursing.
2. Explore the role of nursing leadership as a change agent in shaping the future of healthcare.
3. Explore strategies for improving outcomes of care for culturally diverse populations.
4. Explore topics of resource management including nurse patient ratios, 12 hour shifts, and magnet status.
5. Explore topics of patient safety as it relates to alarm fatigue, staffing, delegation, and scope of practice.
6. Examine the complexity of health care delivery systems responding to health care reform measures, policy, and guidelines.
7. Explore the concepts of communication, inter-professional teams, and the socialization process as they are reflected in the practice and image of professional nursing.
9. Recognize the value of local, state, and national professional associations and certifications for the professional nurse.

Student Learning Outcomes, current:

1. Explore leadership and management concepts as a foundation for safe, high quality nursing.
2. Explore the role of nursing leadership as a change agent in shaping the future of healthcare.
3. Explore strategies for improving outcomes of care for culturally diverse populations.
4. Explore topics of resource management including nurse patient ratios, 12 hour shifts, and magnet status.
5. Explore topics of patient safety as it relates to alarm fatigue, staffing, delegation, and scope of practice.
6. Examine the complexity of health care delivery systems responding to health care reform measures, policy, and guidelines.
7. Explore the concepts of communication, inter-professional teams, and the socialization process as they are reflected in the practice and image of professional nursing.
9. Recognize the value of local, state, and national professional associations and certifications for the professional nurse.

Student Learning Outcomes, proposed:

1. Examine leadership and management theories as a foundation for safe, high quality nursing.
2. Discover the role of nursing leadership as a change agent to shape the future of healthcare.
3. Present leadership and/or management strategies related to trends and issues in nursing.
4. Develop a personal leadership and/or management style for application in the practice of nursing.
5. Examine leadership and management strategies for culturally diverse populations.
6. Discover local, state, and/or national practice engagements for the professional nurse.

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban Expected Implementation: Fall 2019
### Course Modifications

**NURS 493**

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intended semester to offer modified course for the 1st time:</td>
<td>Fall 2019</td>
</tr>
<tr>
<td>Course Prefix:</td>
<td>NURS</td>
</tr>
<tr>
<td>Course No.:</td>
<td>493</td>
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<tr>
<td>Credit Hours:</td>
<td>1</td>
</tr>
<tr>
<td>Course Title:</td>
<td>Senior Capstone</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td></td>
</tr>
<tr>
<td>Current:</td>
<td>Admission to the BSN program. Foundation courses required. See program sheet for details.</td>
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<tr>
<td>Proposed:</td>
<td>Admission to the BSN program.</td>
</tr>
<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes ☑ No</td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes ☑ No</td>
</tr>
</tbody>
</table>

**Health Sciences BSN, Nursing: 3611**

**Description for catalog:**

Current: Synthesis of theoretical nursing concepts through the use of case studies, application exercises, and simulation activities.

Proposed: Experiential learning under the direction of nurse preceptors and nursing faculty in a variety of practice settings. Emphasis is placed on the development of personal and professional strategies necessary to transition from the role of student to graduate nurse.

**Prerequisites:**

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Roles of the student nurse and preceptor</td>
<td></td>
</tr>
<tr>
<td>2. Comprehensive case study</td>
<td></td>
</tr>
<tr>
<td>3. Application of nursing theory</td>
<td></td>
</tr>
<tr>
<td>4. Therapeutic communication techniques</td>
<td></td>
</tr>
<tr>
<td>5. Comprehensive evaluation of clinical experience</td>
<td></td>
</tr>
</tbody>
</table>

### Justification:

Updated content based on recent curriculum mapping sessions with faculty and changed the course outline and description to better reflect the course intent. The current topical course outline #2, 3, and 5 have been removed and content more specific to the transitioning nursing student was added in the proposed topical course outline in 3b below. In the catalog description above, graduate nurse is defined: Graduate Nurse Medical Definition | Merriam-Webster ...

[https://www.merriam-webster.com/medical/graduate](https://www.merriam-webster.com/medical/graduate) nurse

Medical definition of graduate nurse: a person who has completed the regular course of study and practical hospital training in nursing school -abbreviation GN.

The graduate nurse has finished nursing school but has not yet passed the certification exam to be a licensed Registered Nurse.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

**Topical course outline, current:**

1. Role of the student nurse and preceptor
2. Comprehensive case study
3. Application of nursing theory
4. Therapeutic communication techniques
5. Comprehensive evaluation of clinical experience

**Topical course outline, proposed:**

1. Roles of the student nurse and preceptor
2. Self-care strategies
3. Therapeutic communication: Difficult conversations and incivility
4. Ethical principles and moral distress
5. Resume building
**Course Modifications**

6. Debriefing processes related to clinical situations
7. Policy, procedure, and protocol related to clinical nursing practice
8. Preparation for transition to the professional role

**Student Learning Outcomes, current:**

1. Explore role of the student nurse and preceptor.
2. Explore examples of effective use of therapeutic communication in small group discussions.
3. Complete a comprehensive case study on one patient that includes, patient history, pathophysiology of medical diagnoses, treatments, incorporation of the nursing process in the plan of care and discharge planning, describe supportive nursing research and evidence based practice in rationales for the plan of care, and a summary of the experience.
4. Analyze and explain specific nursing theories while reflecting on clinical experiences this semester.
5. Describe and integrate a nurse theorist's work in a discussion of communication, assessment, technical, and critical thinking skills.
6. Comprehensive evaluation of clinical experiences are shared in small group discussions and presentations

**Student Learning Outcomes, proposed:**

1. Explore role of the student nurse and preceptor.
2. Employ principles of effective communication in difficult situations.
3. Examine the impact of ethical and moral distress in the delivery of nursing care.
4. Facilitate effective debriefing discussions.

**Discussions with affected departments:**

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

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Proposed by:  Karen Urban  
Expected Implementation:  Fall 2019
Course Modifications

NURS 493L

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
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<tbody>
<tr>
<td>Course Prefix:</td>
<td>NURS</td>
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<tr>
<td>Course No.:</td>
<td>493L</td>
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<td>Credit Hours:</td>
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<td>Course Title:</td>
<td>Senior Capstone Clinical</td>
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<td>Times for Credit:</td>
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</table>

Prerequisites:
- Current: Admission to the BSN program. Foundation courses required. See program sheet for details.
- Proposed: Admission to the BSN program.

Description for catalog:
- Current: Synthesize knowledge and skills learned in the Baccalaureate program. Refinement of nursing practice skills in a safe learning environment using guided clinical experiences.
- Proposed: Experiential learning under the direction of nurse preceptors and nursing faculty in a variety of practice settings. Emphasis is placed on the development of personal and professional strategies necessary to transition from the role of student to graduate nurse.

Requirement or listed choice for any program of study: Yes [x] No

Change affects program sheet or grad requirements: Yes [x] No

Health Sciences BSN, Nursing: 3611

Justification:
Updated content based on recent curriculum mapping sessions with faculty. Laboratory component for NURS 493 so aligned with didactic course.
In the catalog description above, graduate nurse defined: Graduate Nurse Medical Definition | Merriam-Webster ...
https://www.merriam-webster.com/medical/graduate nurse
Medical definition of graduate nurse: a person who has completed the regular course of study and practical hospital training in nursing school -abbreviation GN.
The graduate nurse has finished nursing school but has not yet passed the certification exam to be a licensed Registered Nurse.

Prerequisites being cleaned up to remove unenforceable prerequisites at the request of the registrar's office.

Topical course outline, current:
1. Student learning Contract with measurable goals.
2. Establishing a relationship with a preceptor for the clinical experience
3. Reflections of clinical experiences
4. Delivery of safe, quality, patient centered care in a specific clinical setting
5. Communication and collaboration of the healthcare team
6. Patient teaching
7. Delegation Process
8. Prioritizing patient care
9. Documentation of nursing care

Topical course outline, proposed:
1. Student learning contract: Assessment, communication, critical thinking and technical skills
2. Professional relationships
Course Modifications

3. Reflective practice
4. Policy, procedure, and protocol related to clinical nursing practice
5. Communication and collaboration

Student Learning Outcomes, current:

1. Develop a student learning contract for the clinical experience. Describe measurable goals for each of the following competencies: assessment, communication, technical skills, and critical thinking characteristics.
2. Strengthen communication skills needed to develop an effective relationship with a preceptor.
3. Explore and reflect on clinical experiences in a journal. Application of evidence-based practice, analysis of ethical issues, evaluation of learning objectives, and examination of professional growth are considered.
4. Demonstrate consistent safe, patient-centered care when administering medications and performing other nursing skills.
5. Collaborate with patients, families, and healthcare team to provide quality patient-centered care.
6. Demonstrate growth in the ability to prioritize care for multiple patients in the clinical setting.
7. Demonstrate a basic understanding of delegation and recognize the implications of clinical judgement, accountability, and the nurse practice act in the delegation process.
8. Explore the role of other disciplines and identify other resources in the delivery of healthcare.

Student Learning Outcomes, proposed:

1. Develop a Contract for Learning to achieve individualized learning outcomes.
2. Develop effective relationships through inter-professional collaboration and communication.
3. Engage in reflective practice to foster critical thinking and decision making as a foundation for professional nursing practice.
4. Demonstrate the ability to prioritize care for patients in the clinical setting.
5. Examine the impact of policy and procedure as it relates to clinical practice and patient outcomes.
6. Assume the role of a nurse generalist in the provision of patient-centered care.

Discussions with affected departments:

December 2018: All BSN faculty met and agreed to proposed course credit and topical content changes. Changes approved by nursing leadership and DHS Department Head. No external departments affected.

Proposed by: Karen Urban
Expected Implementation: Fall 2019
Program Modification

Nursing: 3611

Degree Type: BSN

Revision to program sheet: Yes ☐ No ☐

Description of modification:
The SLOs have been modified to align with the BSN degree that includes the traditional-BSN, the LPN-BSN, and the RN-BSN programs. NURS 472 is proposed to decrease from 3 credits to 2 credits while NURS 490 will increase from 2 credits to 3. No increase or decrease in overall credits hour will occur.

Justification:
Accreditation for the three BSN degree tracks will occur in fall of 2019. During preparation we found that all SLOs needed to be consistent in all tracks. Content from NURS 472, Professional Development II: Health Informatics is better suited for NURS 490 Nursing Leadership and Management, thus is proposed to move out of NURS 472 and into NURS 490 resulting in the credit hour changes. Specifically, leadership and management strategies, communication, and collaboration were included in content related to health informatics. That content will now be moved to the leadership course allowing better focus on health informatics for all nurses in NURS 472.

Revision to SLOs: Yes ☐ No ☐

CMU Baccalaureate Student Learning Outcomes
1. Construct a summative project, paper or practiced-based performance that draws on current research, scholarship and/or techniques, and specialized knowledge in the discipline. (Applied learning; Specialized knowledge)
2. Analyze data critically, reason logically, and apply quantitative analysis methods correctly to develop appropriate conclusions. (Quantitative fluency)
3. Make and defend assertions about a specialized topic in an extended well-organized mostly error-free document and an oral presentation that is appropriate to the discipline. (Communication fluency)
4. Describe reasoned conclusions that articulate the implications and consequences for a particular decision by synthesizing information and methodologies. (Critical Thinking)
5. Find relevant sources of information, evaluate information critically, and apply the information appropriately and effectively to specific purposes. (Information Literacy)
6. Reflect on and respond to ethical, social, civic, and/or environmental challenges at local, national, and/or global levels. (Personal and Social Responsibility)

BSN Student Learning Outcomes
1. Construct a practice-based performance/project drawing on knowledge, skills, and attitudes specific to the discipline of nursing. (Specialized knowledge)
2. Employ quantitative reasoning in making judgements and reaching conclusions. (Quantitative fluency)
3. Make and defend assertions about a nursing practice topic in a well-organized evidence-based document or presentation. (Communication fluency)
4. Demonstrate critical thinking behaviors as a basis for practice. (Critical Thinking)
5. Utilize information from relevant sources to improve health among diverse populations. (Information Literacy)
6. Engage in ethical reasoning to provide optimal nursing care. (Personal and Social Responsibility)

CMU SLO 1. relates to BSN SLO 1.
CMU SLO 2. relates to BSN SLO 2.
CMU SLO 3. relates to BSN SLO 3.
CMU SLO 4. relates to BSN SLO 4.
CMU SLO 5. relates to BSN SLO 5.
CMU SLO 6. relates to BSN SLO 6.
Program Modification

The new BSN SLO's will be added to each course in place of the old BSN SLOs. Changes to the BSN Assessment Plan, as a result of changes to the SLOs, is not anticipated.

Other changes: Yes ☑ No ☐

While this change does not fundamentally change the program, it does align the traditional BSN SLOs with those of the RN-BSN and LPN-BSN programs. Our accrediting body will review our BSN programs in the fall of 2019 and recommend that all nursing programs that result in a BSN degree should share the same SLOs.

Discussions with affected departments:
Discussed at an All-BSN Faculty meeting in Fall 2018 and all BSN faculty, program coordinators, and the DHS Department Head agree with this change. No external departments affected.

Proposed by: Diana Bailey
Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Major ...

The four-year Bachelor of Science in Nursing program provides educational experiences to prepare a professional nurse generalist to practice in a variety of health care settings. The program integrates nursing theory, practice, and science with a broad liberal arts education. The program has been developed to prepare a highly competent professional with the education necessary to meet the increasing need for quality health care in society today and provides students with the foundation for graduate study in nursing. The department usually receives more nursing applications than it can accept. Therefore, grades and completion of required courses are considered in the application process, as well as the score on a standardized entrance test. Colorado Mesa’s BSN nursing program started in 1988 and is fully accredited. The college is very proud to report that the graduates of this program have maintained a 90-100% pass rate on the National Council for Licensure Examination (NCLEX), which is the examination graduates must pass to obtain a license to practice as an RN. The BSN Program is approved by the Colorado State Board of Nursing and accredited by the Commission on Collegiate Nursing Education (CCNE).

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/nursing.html

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Construct a practice-based performance/project drawing on knowledge, skills, and attitudes specific to the discipline of nursing. (Specialized Knowledge)
2. Employ quantitative reasoning in making judgements and reaching conclusions. (Quantitative Fluency)
3. Make and defend assertions about a nursing practice topic in a well-organized evidence-based document or presentation. (Communication Fluency)
4. Demonstrate critical thinking behaviors as a basis for practice. (Critical Thinking)
5. Utilize information from relevant sources to improve health among diverse populations. (Information Literacy)
6. Engage in ethical reasoning to provide optimal nursing care. (Personal and Social Responsibility)

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5. Utilize information from relevant sources to improve health among diverse populations. (Information Literacy)
6. Engage in ethical reasoning to provide optimal nursing care. (Personal and Social Responsibility)

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit...
on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.
Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at [http://www.coloradomesa.edu/registrar/graduation.html](http://www.coloradomesa.edu/registrar/graduation.html).

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.00 cumulative GPA or higher in coursework toward the major content area.
- Must receive a grade of "C" or higher in all foundation and major requirements.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 113 - College Algebra (4*) or higher
  *3 credits apply to the Essential Learning requirement and 1 credit applies to General Elective credit.

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- PSYC 150 - General Psychology (3)
- PSYC 233 - Human Growth and Development (3)

**Natural Sciences** (7 semester hours)
- Select one Natural Sciences course (3)
- BIOL 250 - Introduction to Microbiology (3)
- BIOL 250L - Introduction to Microbiology Laboratory (1)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)

Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (15-16 semester hours, must pass all courses with a grade of “C” or higher)
- BIOL 209 - Human Anatomy and Physiology I (3)
- BIOL 209L - Human Anatomy and Physiology Laboratory I (1)
- BIOL 210 - Human Anatomy and Physiology II (3)
- BIOL 210L - Human Anatomy and Physiology II Laboratory (1)
- BIOL 241 - Pathophysiology (4)
- One of the following courses:
  - STAT 200 - Probability and Statistics (3)
  - STAT 215 - Statistics for Social and Behavioral Sciences (4)
BSN, NURSING REQUIREMENTS (64 semester hours, must pass all courses with a grade of "C" or higher)

- NURS 350 - Health Assessment Across the Lifespan (3)
- NURS 350L - Health Assessment Across the Lifespan Laboratory (1)
- NURS 353 - Foundation of Nursing Practice (4)
- NURS 353L - Foundation of Nursing Practice Laboratory (3)
- NURS 370 - Pharmacology for Nurses I (3)
- NURS 372 - Professional Development I: Nursing Theory, Roles, & Ethics (2)
- NURS 373 - Acute and Chronic Illness I (4)
- NURS 373L - Acute and Chronic Illness I Clinical (3)
- NURS 388 - Mental Health Nursing (3)
- NURS 388L - Mental Health Nursing Clinical (2)
- NURS 394 - Nursing Research: An Evidence-Based Practice (3)
- NURS 459 - Family/Maternal/Child Nursing (4)
- NURS 459L - Family/Maternal/Child Nursing Clinical (3)
- NURS 472 - Professional Development II: Health Informatics (3)
- NURS 473 - Acute and Chronic Illness II (4)
- NURS 473L - Acute and Chronic Illness II Clinical (3)
- NURS 482 - Professional Development III: The Professional Nurse (2)
- NURS 487 - Community and Population Nursing (3)
- NURS 487L - Community and Population Nursing Clinical (2)
- NURS 490 - Nursing Leadership and Management (2)
- NURS 490L - Nursing Leadership and Management Clinical (1)
- NURS 492 - Pharmacology for Nurses II (2)
- NURS 493 - Senior Capstone (1)
- NURS 493L - Senior Capstone Clinical (3)

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 3-4 semester hours)

- MATH 113 - College Algebra (1)
- ________________________________

2019-20 BSN, Nursing (3611). Posted:
SUGGESTED COURSE SEQUENCING

**Freshman Year, Fall Semester: 13 credits**
- ENGL 111 - English Composition (3)
- PSYC 150 - General Psychology (3)
- KINE 100 - Health and Wellness (1)
- Essential Learning - History (3)
- Essential Learning - Natural Science (3)

**Freshman Year, Spring Semester: 14 credits**
- ENGL 112 - English Composition (3)
- PSYC 233 - Human Growth and Development (3)
- Essential Learning - Humanities (3)
- KINA Activity (1)
- BIOL 209 - Human Anatomy and Physiology I (3) and BIOL 209L - Human Anatomy and Physiology Laboratory (1)

**Sophomore Year, Fall Semester: 13-14 credits**
- BIOL 250 - Introduction to Microbiology (3) and BIOL 250L - Introduction to Microbiology Laboratory (1)
- Essential Learning - Fine Arts (3)
- MATH 113 - College Algebra (4)
- General Elective (2-3)

**Sophomore Year, Spring Semester: 15-16 credits**
- BIOL 210 - Human Anatomy and Physiology II (3) and BIOL 210L - Human Anatomy and Physiology II Laboratory (1)
- BIOL 241 - Pathophysiology (4)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- STAT 200 - Probability and Statistics (3) or STAT 215 - Statistics for Social and Behavioral Sciences (4)

**Junior Year, Fall Semester: 16 credits**
- NURS 350 - Assessment Across the Lifespan (3) and NURS 350L - Assessment Across the Lifespan Laboratory (1)
- NURS 353 - Foundation of Nursing Practice (4) and NURS 353L - Foundation of Nursing Practice Laboratory (3)
- NURS 370 - Pharmacology for Nurses I (3)
- NURS 372 - Professional Development I: Nursing Theory, Roles, & Ethics (2)

**Junior Year, Spring Semester: 15 credits**
- NURS 373 - Acute and Chronic Illness I (4) and NURS 373L - Acute and Chronic Illness I Clinical (3)
- NURS 388 - Mental Health Nursing (3) and NURS 388L - Mental Health Nursing Clinical (2)
- NURS 394 - Nursing Research: An Evidence-Based Practice (3)

**Senior Year, Fall Semester: 17-16 credits**
- NURS 459 - Family/Maternal/Child Nursing (4) and NURS 459L - Family/Maternal/Child Nursing Clinical (3)
- NURS 472 - Professional Development II: Health Informatics (4)
- NURS 473 - Acute and Chronic Illness II (4) and NURS 473L - Acute and Chronic Illness II Clinical (3)

**Senior Year, Spring Semester: 16-17 credits**
- NURS 482 - Professional Development III: The Professional Nurse (2)
- NURS 487 - Community and Population Nursing (3) and NURS 487L - Community and Population Nursing Clinical (2)
- NURS 490 - Nursing Leadership and Management (3) and NURS 490L - Nursing Leadership and Management Clinical (1)
- NURS 492 - Pharmacology for Nurses II (2)
- NURS 493 - Senior Capstone (1) and NURS 493L - Senior Capstone Clinical (3)

2019-20 BSN, Nursing (1611). Posted:
Program Modification

Nursing-LPN to BSN: 3610

Degree Type: BSN

Revision to program sheet: Yes ☑ No ☐

Description of modification:
The SLOs have been modified to align with the BSN degree that includes the traditional-BSN, the the LPN-BSN, and the RN-BSN programs.

Justification:
Accreditation for the three BSN degree tracks will occur in fall of 2019. During preparation we found that all SLOs needed to be consistent in all tracks.

Revision to SLOs: Yes ☑ No ☐

CMU Baccalaureate Student Learning Outcomes
1. Construct a summative project, paper or practiced-based performance that draws on current research, scholarship and/or techniques, and specialized knowledge in the discipline. (Applied learning; Specialized knowledge)
2. Analyze data critically, reason logically, and apply quantitative analysis methods correctly to develop appropriate conclusions. (Quantitative fluency)
3. Make and defend assertions about a specialized topic in an extended well-organized mostly error-free document and an oral presentation that is appropriate to the discipline. (Communication fluency)
4. Describe reasoned conclusions that articulate the implications and consequences for a particular decision by synthesizing information and methodologies. (Critical Thinking)
5. Find relevant sources of information, evaluate information critically, and apply the information appropriately and effectively to specific purposes. (Information Literacy)
6. Reflect on and respond to ethical, social, civic, and/or environmental challenges at local, national, and/or global levels. (Personal and Social Responsibility)

BSN Student Learning Outcomes
1. Construct a practice-based performance/project drawing on knowledge, skills, and attitudes specific to the discipline of nursing. (Specialized knowledge)
2. Employ quantitative reasoning in making judgements and reaching conclusions. (Quantitative fluency)
3. Make and defend assertions about a nursing practice topic in a well-organized evidence-based document or presentation. (Communication fluency)
4. Demonstrate critical thinking behaviors as a basis for practice. (Critical Thinking)
5. Utilize information from relevant sources to improve health among diverse populations. (Information Literacy)
6. Engage in ethical reasoning to provide optimal nursing care. (Personal and Social Responsibility)

CMU SLO 1. relates to BSN SLO 1.
CMU SLO 2. relates to BSN SLO 2.
CMU SLO 3. relates to BSN SLO 3.
CMU SLO 4. relates to BSN SLO 4.
CMU SLO 5. relates to BSN SLO 5.
CMU SLO 6. relates to BSN SLO 6.

The BSN SLO's will be added to each course in place of the old BSN SLOs. No other changes will be made to the curriculum. No changes in the assessment is anticipated.

Other changes: Yes ☑ No ☐

While this change does not fundamentally change the program, it does align the LPN-BSN SLOs with those of the RN-BSN and the traditional BSN programs. Our accrediting body will review our BSN programs in the fall of 2019 and recommend that all nursing programs that result in a BSN degree share the same SLOs.
**Program Modification**

*Discussions with affected departments:*

Discussed at an All-BSN Faculty meeting in Fall 2018 and all BSN faculty and program coordinators agree with this change. No external departments affected.

Proposed by:  **Cathy Feller**

Director of Teacher Education Signature:

Expected Implementation:  **Fall 2019**
About This Major . . .
The Bachelor of Science in Nursing (LPN-BSN option) is approved by the Colorado State Board of Nursing. This program is designed for Licensed Practical Nurses to achieve a bachelor of science in Nursing Degree, opening up greater employment opportunities, increased compensation, and more job security. The LPN-integrates nursing theory, practice and science with a liberal arts education. The potential student must demonstrate college-level proficiency in reading, writing and mathematics in order to be admitted to this program. This program has selective admission requirements and requirements may change from year to year. It is the student’s responsibility to obtain the current admission requirements.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Information Management: Utilize information systems in the healthcare system
2. Critical Thinking: Utilize critical thinking skills in the application of the nursing process to provide safe quality care by incorporating evidence-based practice
3. Leadership: Incorporate knowledge of delegation and leadership management skills
4. Communication: Demonstrate effective communication utilizing technology, written documentation, and verbal expression
5. Professionalism: Demonstrate accountability using ethical/legal guidelines and evidence-based nursing practice
6. Quality Improvement: Utilize data to ensure quality improvement and support of evidence-based practice
7. Caring: Incorporate empathetic, compassionate, and caring interventions and behaviors while providing care
8. Diversity: Demonstrate sensitive professional nursing care to culturally diverse patients across the lifespan

Proposed Student Learning outcomes
1. Construct a practice-based performance/project drawing on knowledge, skills, and attitudes specific to the discipline of nursing. (Specialized knowledge)
2. Employ quantitative reasoning in making judgements and reaching conclusions. (Quantitative fluency)
3. Make and defend assertions about a nursing practice topic in a well-organized evidence-based document or presentation. (Communication fluency)
4. Demonstrate critical thinking behaviors as a basis for practice. (Critical Thinking)
5. Utilizes information from relevant sources to improve health among diverse populations. (Information Literacy)
6. Engage in ethical reasoning to provide optimal nursing care. (Personal and Social Responsibility)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.
Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.0 cumulative GPA or higher in coursework toward the major content area.
- A "C" or higher is required in all major courses.
- All essential learning requirements, other lower-division requirements, and foundation courses must be in progress or completed before applying to the program. Additional admission requirements also apply. Please visit the Department of Health Sciences’ website for a complete list of admission requirements and program information.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

Humanities (3 semester hours)
- Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
- PSYC 233 - Human Growth and Development (3)
- Select one Social and Behavioral Science course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with lab (4)
  Recommended: BIOL 101/101L – General Human Biology with Lab (4) or BIOL 250/250L - Microbiology with Lab (4)

History (3 semester hours)
- Select one History course (3)

Fine Arts (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (15-16 semester hours)
- BIOL 209 - Human Anatomy and Physiology I (3)
- BIOL 209L - Human Anatomy and Physiology I Laboratory (1)
- BIOL 210 - Human Anatomy and Physiology II (3)
- BIOL 210L - Human Anatomy and Physiology II Laboratory (1)
- BIOL 241 - Pathophysiology (4)
- One of the following courses:
  STAT 200 - Probability and Statistics (3)
  STAT 215 - Statistics for Social and Behavioral Sciences (4)

2019-20 BSN, Nursing, LPN to BSN (3610). Posted:
BSN: NURSING – LPN to BSN MAJOR REQUIREMENTS (68 semester hours, must pass all courses with a grade of “C” or higher)

☐ LPN Credits (27): Previous degree_________________________ Graduation Date: _______________________
School: ___________________________________________ ACEN Accredited________________________

☐ NURS 318 - Health Assessment and Promotion (3)
☐ NURS 318L - Health Assessment and Promotion Laboratory (1)
☐ NURS 329 - Advanced Adult Health I (3)
☐ NURS 329L - Advanced Adult Health I Laboratory (3)
☐ NURS 333 – Basic Concepts of Pharmacology II (2)
☐ NURS 400 - Nursing Research (3)
☐ NURS 421 - Population Health (4)
☐ NURS 421L - Population Health Laboratory (2)
☐ NURS 427 - Mental Health (3)
☐ NURS 427L - Mental Health Laboratory (1)
☐ NURS 429 - Adult Health II (3)
☐ NURS 429L - Adult Health II Laboratory (3)
☐ NURS 431 - High Risk Obstetrics and Pediatrics (3)
☐ NURS 431L - High Risk Obstetrics and Pediatrics Laboratory (2)
☐ NURS 449 - Leadership (2)
☐ NURS 449L - Leadership Laboratory (1)
☐ NURS 470 - Capstone (2)
**SUGGESTED COURSE SEQUENCING**

### 1st Year, Fall Semester: 17 credits
- ENGL 111 - English Composition (3)
- BIOL 209 - Human Anatomy and Physiology I (3) and BIOL 209L - Human Anatomy and Physiology I Laboratory (1)
- Essential Learning - Social and Behavior Science (3)
- MATH 110 - College Mathematics (3) or higher
- KINA Activity (1)
- Essential Learning - Fine Arts (3)

### 1st Year, Spring Semester: 17 credits
- ENGL 112 - English Composition (3)
- BIOL 210 - Human Anatomy and Physiology II (3) and BIOL 210L - Human Anatomy and Physiology II Laboratory (1)
- PSYC 233 - Human Growth and Development (3)
- Essential Learning - Natural Science (3)
- BIOL 241 - Pathophysiology (4)

### LPN with IV CERTIFICATION: 27 Credits transfer for Nursing 2nd Year

### 2nd Year, Fall Semester: 14 credits
- NURS 101 - Pharmacology Calculations (1)
- NURS 106 - Adult Concepts I (3) and NURS 106L - Adult Concepts I Laboratory (2)
- NURS 112 - Basic Concepts of Pharmacology (2)
- NURS 107 - Foundations of Nursing (3) and NURS 107L - Foundations of Nursing Laboratory (3)

### 2nd Year, Spring Semester: 13 credits
- NURS 117 - Obstetrics and Pediatrics (4) and NURS 117L - Obstetrics and Pediatrics Laboratory (2)
- NURS 156 - Socialization into Practical Nursing (1)
- NURS 172 - Adult Concepts II (3) and NURS 172L - Adult Concepts II Laboratory (3)

### 3rd Year, Fall Semester: 18-19 credits
- Essential Learning – Natural Science with Lab – Recommended: BIOL 101/10L - General Human Biology with Lab (4) or BIOL 250/250L - Microbiology with Lab (4)
- STAT 200 - Probability and Statistics (3) or STAT 215 - Statistics for Social and Behavioral Sciences (4)
- Essential Learning - History (3)
- KINE 100 - Health and Wellness (1)
- Essential Learning - Humanities (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

### 3rd Year, Spring Semester: 15 credits
- NURS 318 - Health Assessment and Promotion (3) and NURS 318L - Health Assessment and Promotion Laboratory (1)
- NURS 329 - Advanced Adult Health I (3) and NURS 329L - Advanced Adult Health I Laboratory (3)
- NURS 333 – Basic Concepts of Pharmacology II (2)
- NURS 400 - Nursing Research (3)

### 4th Year, Summer Semester: 11 credits
- NURS 421 - Population Health (4) and NURS 421L - Population Health Laboratory (2)
- NURS 427 - Mental Health (3) and NURS 427L - Mental Health Laboratory (1)

### 4th Year, Fall Semester: 16 credits
- NURS 429 - Adult Health II (3) and NURS 429L - Adult Health II Laboratory (3)
- NURS 431 - High Risk Obstetrics and Pediatrics (3) and NURS 431L - High Risk Obstetrics and Pediatrics Laboratory (2)
- NURS 449 - Leadership (2) and NURS 449L - Leadership Laboratory (1)
- NURS 470 - Capstone (2)
Program Modification

Nursing-RN to BSN: 3613

Degree Type: BSN

Revision to program sheet: Yes ☑ No □

Description of modification:
The SLOs have been modified to align with the BSN degree that includes the traditional-BSN, the LPN-BSN, and the RN-BSN programs.

Justification:
Accreditation for the three BSN degree tracks will occur in fall of 2019. During preparation we found that all SLOs needed to be consistent in all tracks.

Revision to SLOs: Yes ☑ No □

CMU Baccalaureate Student Learning Outcomes
1. Construct a summative project, paper or practiced-based performance that draws on current research, scholarship and/or techniques, and specialized knowledge in the discipline. (Applied learning; Specialized knowledge)
2. Analyze data critically, reason logically, and apply quantitative analysis methods correctly to develop appropriate conclusions. (Quantitative fluency)
3. Make and defend assertions about a specialized topic in an extended well-organized mostly error-free document and an oral presentation that is appropriate to the discipline. (Communication fluency)
4. Describe reasoned conclusions that articulate the implications and consequences for a particular decision by synthesizing information and methodologies. (Critical Thinking)
5. Find relevant sources of information, evaluate information critically, and apply the information appropriately and effectively to specific purposes. (Information Literacy)
6. Reflect on and respond to ethical, social, civic, and/or environmental challenges at local, national, and/or global levels. (Personal and Social Responsibility)

BSN Student Learning Outcomes
1. Construct a practice-based performance/project drawing on knowledge, skills, and attitudes specific to the discipline of nursing. (Specialized knowledge)
2. Employ quantitative reasoning in making judgements and reaching conclusions. (Quantitative fluency)
3. Make and defend assertions about a nursing practice topic in a well-organized evidence-based document or presentation. (Communication fluency)
4. Demonstrate critical thinking behaviors as a basis for practice. (Critical Thinking)
5. Utilize information from relevant sources to improve health among diverse populations. (Information Literacy)
6. Engage in ethical reasoning to provide optimal nursing care. (Personal and Social Responsibility)

CMU SLO 1. relates to BSN SLO 1.
CMU SLO 2. relates to BSN SLO 2.
CMU SLO 3. relates to BSN SLO 3.
CMU SLO 4. relates to BSN SLO 4.
CMU SLO 5. relates to BSN SLO 5.
CMU SLO 6. relates to BSN SLO 6.

The BSN SLO's will be added to each course in place of the old BSN SLOs. No other changes will be made to the curriculum. The RN-BSN Assessment is included in the BSN Assessment Plan and no changes in the assessment is anticipated.

Other changes: Yes ☑ No □

While this change does not fundamentally change the program, it does align the RN-BSN SLOs with those of the traditional BSN and LPN-BSN programs. Our accrediting body will review our BSN programs in the fall of 2019 and recommend that all nursing programs that result in a BSN degree share the same SLOs.
**Program Modification**

**Discussions with affected departments:**
Discussed at an All-BSN Faculty meeting in Fall 2018 and all BSN faculty, program coordinators, and the DHS Department Head agree with this change. No external departments affected.

**Proposed by:** Janice Holvoet

**Director of Teacher Education Signature:**

**Expected Implementation:** Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Science in Nursing
Major: Nursing: RN-BSN Option

About This Major...

The Registered Nurse to Baccalaureate of Science in Nursing (BSN) Program is approved by the Colorado State Board of Nursing and accredited by the Commission on Collegiate Nursing Education (CCNE). This program is designed for Associate degree and Diploma RNs. Up to 38 credits from the Associate or Diploma degree may transfer in toward the BSN degree. The program provides educational experiences to prepare a professional nurse generalist to practice in a variety of health care settings. The program integrates nursing theory, practice, and science with a broad liberal arts education. The program has been developed to prepare a highly competent professional with the education necessary to meet the increasing need for quality health care in society today and provides students with the foundation for graduate study in nursing.

Colorado Mesa’s BSN nursing program started in 1988 and has been fully accredited since its inception. The RN-BSN program began originally in 1979; the new program and currently provides all nursing courses in an online format to provide better access to registered nurses.

For more information on this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Promote a culture of respect and safety. (Specialized Knowledge; Applied Learning)
2. Communicate the importance of lifelong learning and professional career development. (Applied Learning)
3. Integrate evidence-based findings into professional nursing practice. (Applied Learning)
4. Utilize scientific inquiry and quantitative reasoning as a basis for patient care decisions. (Quantitative Fluency)
5. Collaborate in interprofessional communication to improve healthcare outcomes. (Communication Fluency)
6. Integrate leadership and management principles in the delivery of health care. (Communication Fluency)
7. Employ critical thinking as a basis for nursing practice. (Critical Thinking)
8. Facilitate access to resources necessary to meet diverse health care needs. (Intellectual Skills-Critical Thinking)

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at [http://www.coloradomesa.edu/registrar/graduation.html](http://www.coloradomesa.edu/registrar/graduation.html).

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

**INSTITUTIONAL DEGREE REQUIREMENTS**

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

**PROGRAM-SPECIFIC DEGREE REQUIREMENTS**

- 2.0 GPA or higher in coursework toward the major content area.
**ESSENTIAL LEARNING REQUIREMENTS** [31 semester hours]
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of "C" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 or higher – College Mathematics (3)

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- PSYC 150 - General Psychology (3)
- PSYC 233 - Human Growth and Development (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)
  - BIOL 250 - Microbiology (3) and BIOL 250L - Microbiology Laboratory (1) strongly recommended

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (15 semester hours)
- BIOL 209 - Human Anatomy and Physiology I (3)
- BIOL 209L - Human Anatomy and Physiology Laboratory I (1)
- BIOL 210 - Human Anatomy and Physiology II (3)
- BIOL 210L - Human Anatomy and Physiology II Laboratory (1)
- BIOL 241 - Pathophysiology (4)
- STAT 200 - Probability and Statistics (3)
BSN, NURSING REQUIREMENTS (31 semester hours, must pass all courses with a grade of “C” or higher)

**Core** (31 semester hours)
- NURS 320 - Health Assessment and Promotion (3)
- NURS 320L - Health Assessment and Promotion Laboratory (1)
- NURS 300 - Developing the Baccalaureate Role (3)
- NURS 408 - Health Informatics (3)
- NURS 409 - Quality Improvement (3)
- NURS 410 - Population Health Nursing (3)
- NURS 410L - Population Health Nursing Practice Experience (1)
- NURS 426 - Nursing Research and Evidence Based Practice (3)
- NURS 430 - Leadership for the RN (3)
- NURS 430L - Leadership for the RN Laboratory (1)
- NURS 418 - Gerontological Nursing and Chronic Illness (3)
- NURS 432 - Capstone Leadership for the RN (4)

**GENERAL ELECTIVES** (9 upper division semester hours) (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours.)
- __________________________________________________________________

Prior RN nursing coursework will be awarded up to 38 credit hours, which will bring the total number of credits above the 120 minimum hour requirement.

- Previous RN degree: ________________________________
- School: ________________________________
- NLN Accredited: ________________________________
- Graduation Date: ________________________________

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SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 14 credits
- ENGL 111 - English Composition (3)
- Essential Learning - Natural Science with Lab (4) (BIOL 250 encouraged)
- PSYC 150 - General Psychology (3)
- KINE 100 - Health and Wellness (1)
- Essential Learning - History (3)

Freshman Year, Spring Semester: 13 credits
- ENGL 112 - English Composition (3)
- Essential Learning - Natural Science (3)
- PSYC 233 - Human Growth and Development (3)
- Essential Learning - Humanities (3)
- KINA Activity (1)

Sophomore Year, Fall Semester: 13 credits
- BIOL 209 - Human Anatomy and Physiology I (3) and BIOL 209L - Human Anatomy and Physiology Laboratory (1)
- Essential Learning - Fine Arts (3)
- MATH 110 or higher College Mathematics (3)
- General Elective (3)

Sophomore Year, Spring Semester: 15 credits
- BIOL 210 - Human Anatomy and Physiology II (3) and BIOL 210L - Human Anatomy and Physiology II Laboratory (1)
- BIOL 241 - Pathophysiology (4)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- STAT 200 - Probability and Statistics (3)

Junior Year, Fall Semester: 13 credits
- NURS 300 - Developing the Baccalaureate Role (3)
- NURS 408 - Health Informatics (3)
- NURS 320 - Health Assessment and Promotion (3) and NURS 320L - Health Assessment and Promotion Laboratory (1)
- Upper Division Nursing Elective (3)

Junior Year, Spring Semester: 13 credits
- NURS 409 - Quality Improvement (3)
- NURS 410 - Population Health Nursing (3) and NURS 410L - Population Health Nursing Practice Experience (1)
- NURS 426 - Nursing Research and Evidence Based Practice (3)
- Upper Division General Elective (3)

Senior Year, Fall Semester: 14 credits
- NURS 418 - Gerontological Nursing and Chronic Illness (3)
- NURS 430 - Leadership for the RN (3) and NURS 430L - Leadership for the RN Laboratory (1)
- NURS 432 - Capstone Leadership for the RN (4)
- Upper Division General Elective (3)

Program Modification

Kinesiology-K-12 Education: 3137

Degree Type: BA

Revision to program sheet: Yes ☒ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Change "take" to "pass" on program specific requirements. (5th bullet point)
3. All other changes approved by UCC. The above are additional changes.

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.

Revision to SLOs: Yes ☒ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☒ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:
The Kinesiology Department and The Center for Teacher Education have both approved these changes as of January 29, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Arts
Major: Kinesiology
Concentration: K-12 Teaching

About This Major . . .
Students will be prepared to teach elementary, middle, and high school physical education. The degree plan includes coursework covering human anatomy and physiology, team and individual sports, exercise science, and teaching methods courses. Students will gradually accumulate over 200 hours of classroom experience before beginning student teaching. School districts throughout Western Colorado provide opportunities to gain experience with children of all ages and backgrounds in a variety of school settings.

Before being admitted into the Teacher Education program, the following courses must be completed with a grade of B or better: ENGL 111, ENGL 112, PSYC 233, EDUC 115, and EDUC 215. (English honors may be substituted for ENGL 111 and 112.) A grade of C or better is required for MATH 110. Also, a minimum cumulative GPA of 2.8 (including transfer and CMU coursework) is required of all students for admission into the program.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

Kinesiology Outcomes:
1. Apply scientific concepts that relate to the development of physically educated individuals. (Critical Thinking)
2. Consistently display competent motor skills and fitness levels. (Applied Learning)
3. Plan and teach developmentally appropriate standard based lesson plans. (Specialized Knowledge)
4. Demonstrate teaching skills and strategies that improve learning for all student abilities. (Communication Fluency)
5. Use a variety of assessments and feedback procedures to foster student learning. (Applied Learning, Quantitative Fluency)
6. Demonstrate appropriate attitudes and values (dispositions) that are essential to teachers. (Applied Learning)

Teacher Education Outcomes:
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literary/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)
6. Instruct K-12 students based on self-written learning plans to address individual learning and developmental patterns. (Specialized Knowledge)
7. Design a safe and supportive learning environment for elementary and secondary education students. (Applied Learning)
8. Apply content knowledge while working with learners to access information in real world settings assuring learner mastery of the content. (Specialized Knowledge)
9. Integrate assessment, planning, and instructional strategies in coordinated and engaging ways through multiple means of communication. (Critical Thinking/Communication Fluency)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning
courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.
Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practice.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.80 cumulative GPA or higher in all CMU coursework.
- 2.80 cumulative GPA or higher in coursework toward the major content area.
- All EDUC prefix courses must be completed with a grade of “B” or better to progress through program sequence.
- All other coursework toward the degree must be successfully completed prior to the internship.
- Kinesiology licensure students must pass the Praxis II content exam prior to student teaching (fee required).
- Students must have ENGL 111 & 112 (or ENGL 129), PSYC 233, EDUC 115, EDUC 215 (All with grade of “B” or higher) and MATH 110 or higher (with grade of “C” or higher) and formal acceptance to the Teacher Education Program.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of "B" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

Humanities (3 semester hours)
- Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
- PSYC 233 - Human Growth and Development (3) (must receive a grade of "B" or better)
- Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

History (3 semester hours)
- Select one History course (3)

Fine Arts (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (3 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)
- Select one Activity course (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (4-7 semester hours)
- BIOL 209 - Human Anatomy and Physiology (3)
- BIOL 209L - Human Anatomy and Physiology Laboratory (1)
- Student must have a current CPR card OR take one of the following:
  - KINE 250 - Lifeguard Training (3)
  - KINE 265 - First Aid and CPR/AED for the Health Care Provider (3)
BA, KINESIOLOGY, K-12 TEACHING REQUIREMENTS (68-70 semester hours)

Required Core Courses (17 semester hours)
- KINE 200 - History and Philosophy of Sport and Physical Education
- KINE 213 - Applications of Physical Fitness and Exercise Prescription
- KINE 303 - Physiology of Exercise
- KINE 303L - Physiology of Exercise Laboratory
- KINE 309 - Anatomical Kinesiology
- KINE 401 - Organization/Administration/Legal Considerations in Physical Education and Sports
- KINE 494 - Kinesiology Senior Seminar

Required Concentration Courses (31-33 semester hours)
- KINE 211 - Methods of Lifetime, Individual, and Dual Activities
- KINE 214 - Methods of Team Activities
- KINE 256 - Methods of Creative Play, Dance, Gymnastics, and Literacy
- KINE 260 - School Health Education
- KINE 301 - Health and Fitness Assessment
- KINE 320 - Methods of Teaching Physical Education in Elementary Schools (10 field experience hours)
- KINE 360 - Motor Learning
- KINE 480 - Inclusive Physical Activity
- KINE 408 - Methods of Teaching Physical Education in Secondary Schools (10 field experience hours)
- KINE 497 - Pre-Internship in Physical Education (120 field experience hours)
- One of the following courses:
  - KINA 101 - Beginning Swimming
  - KINA 102 - Intermediate Swimming
  - KINE 251 - Water Safety Instructor Course

K-12 Licensure Requirements (20 semester hours, must earn a grade of "B" or better in all EDUC courses.)
- EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
- EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3) (20 field experience hours)
- EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
- EDUC 499D - Teaching Internship and Colloquia: Elementary for K-12 (6) (300 field experience hours)
- EDUC 499H - Teaching Internship and Colloquia: Secondary for K-12 (6) (300 field experience hours)

Praxis II Exam Passed

All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must PASS the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 5-10 semester hours.)
## Suggested Course Sequencing

### Freshman Year, Fall Semester: 16 credits
- ENGL 111 - English Composition (3)
- KINE 100 - Health and Wellness (1)
- KINE 200 - History and Philosophy of Sport and Physical Education (3)
- Essential Learning - History (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - Natural Science (3)

### Freshman Year, Spring Semester: 17 credits
- ENGL 112 - English Composition (3)
- KINE 213 - Applications of Physical Fitness and Exercise Prescription (3)
- BIOL 209 - Human Anatomy and Physiology (3)
- BIOL 209L - Human Anatomy and Physiology Laboratory (1)
- MATH 110 - College Mathematics (3) or higher
- Essential Learning - Humanities (3)
- EDUC 115 - What It Means to be an Educator (1)

### Sophomore Year, Fall Semester: 16 credits
- KINE 211 - Methods of Lifetime, Individual, and Dual Activities (3)
- Essential Learning - Social and Behavioral Science (3)
- Essential Learning - Natural Science with Lab (4)
- PSYC 233 - Human Growth and Development (3)
- General Elective (3)

### Sophomore Year, Spring Semester: 15-16 credits
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- EDUC 215 - Teaching as a Profession (1)
- KINA Activity (1)
- KINE 214 - Methods of Team Activities (3)
- KINE 256 - Methods of Creative Play, Dance, Gymnastics, and Literacy (3)
- KINE 250 - Lifeguard Training (3) or KINE 265 - First Aid and CPR/AED for the Health Care Provider (3)
- General Elective (if needed) (1)

### Junior Year, Fall Semester: 15 credits
- KINE 309 - Anatomical Kinesiology (3)
- KINE 360 - Motor Learning (3)
- KINE 408 - Methods of Teaching Physical Education in Secondary Schools (3)
- KINE 480 - Inclusive Physical Activity (3)
- KINE 260 - School Health Education (3)
- KINE 301 - Health and Fitness Assessment (3)

### Junior Year, Spring Semester: 12-15 credits
- KINE 260 - School Health Education (3)
- KINE 303 - Physiology of Exercise (3)
- KINE 303L - Physiology of Exercise Laboratory (1)
- KINE 320 - Methods of Teaching Physical Education in Elementary Schools (3)
- KINA Activity (1)
- KINA 101 - Beginning Swimming (1), KINA 102 - Intermediate Swimming (1) or KINE 251 - Water Safety Instructor Course (3)
- General Elective (if needed) (3)
Senior Year, Fall Semester: 13-16 credits

- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3)
- EDUC 343 - Teaching to Diversity (3)
- KINE 401 - Organization/Administration/Legal Considerations in Physical Education and Sports (3)
- KINE 494 - Kinesiology Senior Seminar (1)
- KINE 497 - Pre-Internship in Physical Education (3)
- General Elective (if needed) (3)

Senior Year, Spring Semester: 12 credits

- EDUC 499D - Teaching Internship and Colloquia: Elementary for K-12 (6)
- EDUC 499H - Teaching Internship and Colloquia: Secondary for K-12 (6)
Course Modifications

ENGL 111

Intended semester to offer modified course for the 1st time: Fall 2019

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<td>Requirement or listed choice for any program of study:</td>
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</tr>
<tr>
<td>Change affects program sheet or grad requirements:</td>
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Course is a requirement for a new program:

Procedural Exception approved for the above requirements of Program Mods (because course exists on virtually every Program Sheet across campus).

Justification:

Currently, ENGL 111 and 112 have the same title (English Composition). For Registration reasons, we need to clarify that they are different courses by title. A Course Mod for ENGL 112 is being submitted concurrently.

Topical course outline, current:
NA

Topical course outline, proposed:
NA

Student Learning Outcomes, current:
NA

Student Learning Outcomes, proposed:
NA

Essential Learning SLOs, proposed:

Essential Learning Subcommittee approved change - notified by Doug O'Roark on 1/30/19.

Discussions with affected departments:

Although the course title change will not alter the ESSL status of these two courses, the ESSL committee will need to approve the name change(s).

Proposed by: Jennifer R Hancock
Expected Implementation: Fall 2019
**Course Modifications**

**ENGL 112**

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<td>Requirement or listed choice for any program of study: Yes</td>
<td>No</td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements: Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Course is a requirement for a new program:

- Procedural Exception approved for the above requirements of Program Mods (because course exists on virtually every Program Sheet across campus).

Justification:

Currently, ENGL 111 and 112 have the same title (English Composition). For Registration reasons, we need to clarify that they are different courses by title. A Course Mod for ENGL 111 is being submitted concurrently.

Topical course outline, current:

NA

Topical course outline, proposed:

NA

Student Learning Outcomes, current:

NA

Student Learning Outcomes, proposed:

NA

Essential Learning SLOs, proposed:

Essential Learning Subcommittee approved change - notified by Doug O'Roark on 1/30/19.

Discussions with affected departments:

Although the course title change will not alter the ESSL status of these two courses, the ESSL committee will need to approve the name change(s).

Proposed by: Jennifer R Hancock

Expected Implementation: Fall 2019
Program Modification

English-Secondary Education: 3213

Degree Type: BA

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Add program requirement about passing Praxis II prior to student teaching (internship) semester.

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.

Revision to SLOs: Yes ☑ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☑ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:
The Languages, Literature, and Mass Communications Department and The Center for Teacher Education have both approved these changes as of January 29, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Arts
Major: English
Concentration: Secondary Education

About This Major . . .
The Center for Teacher Education offers a comprehensive program of study that leads to licensure in Colorado. Our professors are experienced, knowledgeable, accessible, and dedicated to the improvement of public education. At Colorado Mesa University, we pride ourselves on the personal touch. Faculty offer one-on-one guidance for course selection, field placements, student teaching, and employment. Our mission is to develop Educators as Innovators; we are always looking to improve the quality of learning in our programs and K-12 schools.

As a student, you will gradually accumulate over 200 hours of classroom experience before beginning student teaching. School districts throughout western Colorado provide opportunities to gain experience with children of all ages and backgrounds in a variety of school settings. The secondary licensure program provides teacher education candidates with broad content knowledge in English and prepares them as teachers for grades 7 through 12. A minimum of 75 credit hours of Essential Learning and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education secondary licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria. EDUC 115 and EDUC 215, must be taken before applying to the program.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

English Outcomes:
1. Express themselves effectively in a variety of forms.
2. State and support, sometimes using research, interpretive claims about a variety of texts.
3. Identify the salient features of literary texts from a broad range of English and American literary periods.
4. Employ knowledge of literary traditions to produce imaginative writing.
5. Use research to assist in problem-solving.

Teacher Education Outcomes:
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

6. Instruct K-12 students based on self-written learning plans to address individual learning and developmental patterns in English. (Specialized Knowledge)
7. Design a safe and supportive learning environment for elementary and secondary education students. (Applied Learning)
8. Apply English content knowledge while working with learners to access information in real-world settings, ensuring learner mastery of the content. (Specialized Knowledge)
9. Integrate assessment, planning, and instructional strategies in coordinated and engaging ways through multiple means of communication. (Critical Thinking/Communication Fluency)

Advising Process and DegreeWorks

2019-20 BA, English, Secondary Education (3213). Posted:
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

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Students must complete the following in the first two months of the semester prior to completing their degree requirements:

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- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

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If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

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The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 3.00 cumulative GPA or higher in all CMU coursework.
- All EDUC prefix courses must be completed with a grade of “B” or better.
- Students must pass the PRAXIS II exam in the content area prior to beginning the internship. Also, all other coursework toward the degree must be successfully completed prior to the internship.
- A grade of "C" or better must be earned in all required foundation and major courses, unless otherwise stated.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of "B" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- PSYC 233 - Human Growth and Development (3) (must receive a grade of “B” or better)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity Course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (21 semester hours, must pass all courses with a grade of "C" or better.)
- ENGL 210 - Introduction to Literary Studies (3)
- ENGL 254 - Survey of English Literature I (3)
- ENGL 255 - Survey of English Literature II (3)
- ENGL 261 - Survey of American Literature I (3)
- ENGL 262 - Survey of American Literature II (3)

Two consecutive classes in the same foreign language. FLAS 114 & 115 will NOT fulfill this requirement.
- 
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2019-20 BA, English, Secondary Education (3213). Posted:
BACHELOR OF ARTS: ENGLISH, SECONDARY EDUCATION REQUIREMENTS (33 semester hours, must pass all courses with a grade of "C" or better.)

English Core (6 semester hours)
- ENGL 421 - Introduction to Literary Theory and Criticism (3)
- ENGL 494 - Seminar in Literature (3)*
*ENGL 494 must be taken after 60 semester hours have been accumulated. A student must take the seminar in their junior year.

Secondary Teaching Related Courses (18 semester hours)
- ENGL 250 - Introduction to Creative Writing (3)
- ENGL 355 - Shakespeare (3)
- ENGL 365 - Literature for Young Adults (3)
- ENGL 451 - Understanding and Using English Grammar (3)
- ENGL 491 - Composition Theory and Practice (3)
- THEA 403 - Methods of Teaching Drama and Speech (3)

Upper Division Literature (3 semester hours)
- One of the following classes:
  - ENGL 301 - Classical Greek and Latin Literature (3)
  - ENGL 311 - English Medieval Literature (3)
  - ENGL 313 - English Renaissance Literature (3)
  - ENGL 314 - American Literature to 1830 (3)
  - ENGL 315 - American Literature 1830-1870 (3)
  - ENGL 316 - American Literature 1870-1900 (3)
  - ENGL 330 - Women in World Thought and Literature (3)
  - ENGL 370 - Major Author (3)
  - ENGL 415 - American Literature 1900-1945 (3)
  - ENGL 436 - American Literature 1945-Present (3)
  - ENGL 438 - Ethnic Experiences in U.S. Literature (3)
  - ENGL 440 - History of the English Language (3)
  - ENGL 470 - 18th Century British Literature (3)
  - ENGL 471 - British Romanticism (3)
  - ENGL 475 - Victorian Literature (3)
  - ENGL 478 - 20th Century British Literature (3)

English Electives (6 semester hours)
Choose two courses from the following list. One course must be upper division.
- ENGL 131 - Western World Literature I (3)
- ENGL 132 - Western World Literature II (3)
- ENGL 150 - Introduction to Literature (3)
- ENGL 222 - Mythology (3)
- ENGL 240 - Children's Literature (3)
- ENGL 301 - Classical Greek and Latin Literature (3)
- ENGL 311 - English Medieval Literature (3)
- ENGL 313 - English Renaissance Literature (3)
- ENGL 314 - American Literature to 1830 (3)
- ENGL 315 - American Literature 1830-1870 (3)
- ENGL 316 - American Literature 1870-1900 (3)
- ENGL 330 - Women in World Thought and Literature (3)
- ENGL 335 - The Bible as Literature (3)
- ENGL 343 - Language Systems and Linguistic Diversity (3)
- ENGL 380 - Memoir and Creative Non-Fiction (3)

2019-20 BA, English, Secondary Education (3213). Posted:
ENGL 381 - Creative Writing: Fiction (3)
ENGL 382 - Creative Writing: Crafting Fiction (3)
ENGL 383 - Creative Writing: Poetry (3)
ENGL 384 - Art of the Essay (3)
ENGL 385 - Technical and Professional Writing (3)
ENGL 386 - Roots of Modern Rhetoric (3)
ENGL 387 - Literary Editing and Publishing (3)
ENGL 388 - Creative Writing: Crafting Poetry (3)
ENGL 389 - Screenwriting (3)
ENGL 390 - Introduction to Film Studies (3)
ENGL 395 - Independent Study (1-3)
ENGL 396 - Topics (1-3)
ENGL 415 - American Folklore (3)
ENGL 423 - Genre Studies (3)
ENGL 435 - American Literature 1900-1945 (3)
ENGL 436 - American Literature 1945-Present (3)
ENGL 438 - Ethnic Experience in U.S. Literature (3)
ENGL 440 - History of the English Language (3)
ENGL 470 - 18th Century British Literature (3)
ENGL 471 - British Romanticism (3)
ENGL 475 - Victorian Literature (3)
ENGL 478 - 20th Century British Literature (3)
ENGL 495 - Independent Study (1-3)
ENGL 496 - Topics (1-3)

SECONDARY EDUCATION REQUIREMENTS (29 semester hours, must pass courses with a grade of "B" or better.)
Program Requirements: ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215 (all with a grade of "B" or better) and formal acceptance to the Teacher Education Program.

☐ EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
☐ EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
☐ EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3) (20 field experience hours)
☐ EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
☐ EDUC 442 - Integrating Literacy across the Curriculum: Secondary and K-12 Art (3) (60 field experience hours)
☐ EDUC 475 - Classroom Management for K-12 Educators (1)
☐ EDUC 497 - Content Methodology Practicum (3) (80 field experience hours)
☐ EDUC 497A - Methods of Teaching Secondary English (2)*
  *This course is only offered in the fall semester. It may be taken with either the 300-level or 400-level EDUC courses but must be taken before the student teaching semester.
☐ EDUC 499G - Teaching Internship and Colloquia: Secondary (12) (600 field experience hours)

Praxis II Exam Passed

All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must PASS the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.

GENERAL ELECTIVES
(All college level courses appearing on final transcript, not listed above to bring total semester hours to 120.)

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2019-20 BA, English, Secondary Education (3213). Posted:
SUGGESTED COURSE SEQUENCING FOR SPRING INTERNS

Freshman Year, Fall Semester: 16 credits
- ENGL 111 - English Composition (3)
- Essential Learning - History (3)
- Foundation Course - Foreign Language (3)
- KINE 100 - Health and Wellness (1)
- MATH 110 - College Mathematics (3)
- PSYC 233 - Human Growth and Development (3)

Freshman Year, Spring Semester: 16 credits
- ENGL 112 - English Composition (3)
- ENGL 250 - Introduction to Creative Writing (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - Natural Science with Lab (4)
- Foundation Course - Foreign Language (3)

Sophomore Year, Fall Semester: 14 credits
- EDUC 115 - What It Means to be an Educator (1)
- ENGL 254 - Survey of English Literature I (3)
- ENGL 261 - Survey of American Literature I (3)
- Essential Learning - Humanities (3)
- Essential Learning - Social and Behavioral Science (3)
- KINA Activity (1)

Sophomore Year, Spring Semester: 16 credits
- ENGL 210 - Introduction to Literary Studies (3)
- ENGL 255 - Survey of English Literature II (3)
- ENGL 262 - Survey of American Literature II (3)
- Essential Learning - Natural Science (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

Junior Year, Fall Semester: 16 credits
- EDUC 215 - Teaching as a Profession (1)
- ENGL 355 - Shakespeare (3)
- ENGL 451 - Understanding and Using English Grammar (3)
- English Elective (3)
- Upper Division English Elective (3)
- Upper Division Literature Elective (3)

Junior Year, Spring Semester: 15 credits
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3)
- EDUC 343 - Teaching to Diversity (3)
- ENGL 365 - Literature for Young Adults (3)
- ENGL 421 - Introduction to Literary Theory and Criticism (3)
- ENGL 491 - Composition Theory and Practice (3)

Senior Year, Fall Semester: 15 credits
- EDUC 442 - Integrating Literacy across the Curriculum: Secondary and K-12 Art (3)
- EDUC 475 - Classroom Management for K-12 Educators (1)
- EDUC 497 - Content Methodology Practicum (3)
- EDUC 497A - Methods of Teaching Secondary English (2)
- ENGL 494 - Seminar in Literature (3)
- THEA 403 - Methods of Teaching Drama and Speech (3)

Senior Year, Spring Semester: 12 credits
- EDUC 499G - Teaching Internship and Colloquia: Secondary (12)
SUGGESTED COURSE SEQUENCING FOR FALL INTERNS

**Freshman Year, Spring Semester: 16 credits**
- ENGL 111 - English Composition (3)
- Essential Learning - History (3)
- Foundation Course - Foreign Language (3)
- KINE 100 - Health and Wellness (1)
- MATH 110 - College Mathematics (3)
- PSYC 233 - Human Growth and Development (3)

**Freshman Year, Fall Semester: 17 credits**
- EDUC 115 - What It Means to be an Educator (1)
- ENGL 112 - English Composition (3)
- ENGL 250 - Introduction to Creative Writing (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - Natural Science with Lab (4)
- Foundation Course - Foreign Language (3)

**Sophomore Year, Spring Semester: 17 credits**
- EDUC 215 - Teaching as a Profession (1)
- ENGL 261 - Survey of American Literature I (3)
- ENGL 254 - Survey of English Literature I (3)
- Essential Learning - Social and Behavioral Science (3)
- Essential Learning - Humanities (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**Sophomore Year, Fall Semester: 16 credits**
- ENGL 210 - Introduction to Literary Studies (3)
- ENGL 255 - Survey of English Literature II (3)
- ENGL 262 - Survey of American Literature II (3)
- ENGL 365 - Literature for Young Adults (3)
- Essential Learning - Natural Science (3)
- KINA Activity (1)

**Junior Year, Spring Semester: 15 credits**
- ENGL 355 - Shakespeare (3)
- ENGL 421 - Introduction to Literary Theory and Criticism (3)
- English Elective (3)
- Upper Division English Elective (3)
- Upper Division Literature Elective (3)

**Junior Year, Fall Semester: 14 credits**
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3)
- EDUC 343 - Teaching to Diversity (3)
- EDUC 497A - Methods of Teaching Secondary English (2)
- ENGL 451 - Understanding and Using English Grammar (3)
- THEA 403 - Methods of Teaching Drama and Speech (3)

**Senior Year, Spring Semester: 13 credits**
- EDUC 442 - Integrating Literacy across the Curriculum: Secondary and K-12 Art (3)
- EDUC 475 - Classroom Management for K-12 Educators (1)
- EDUC 497 - Content Methodology Practicum (3)
- ENGL 491 - Composition Theory and Practice (3)
- ENGL 494 - Seminar in Literature (3)

Senior Year, Fall Semester: 12 credits
- EDUC 499G - Teaching Internship and Colloquia: Secondary (12)
Program Modification

Liberal Arts-Elementary Education, English: 3291

Degree Type: BA

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Change "take" to "pass" on program specific requirements. (5th bullet point)
3. Add MATH 205 to the list of courses required prior to being accepted into Teacher Education (last bullet on "program specific requirements on program sheet.)

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.
3. Essential Learning Courses should be completed prior to entering the Teacher Education program.

Revision to SLOs: Yes ☑ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☑ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:

The Language, Literature, Mass Communication Deparement and The Center for Teacher Education have both approved these changes as of January 19, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
2019-20 PROGRAM REQUIREMENTS
Degree: Bachelor of Arts
Major: Liberal Arts, Elementary Education
Concentration: English

About This Major . . .
The Center for Teacher Education offers a comprehensive program of study that leads to licensure in Colorado. Our professors are experienced, knowledgeable, accessible, and dedicated to the improvement of public education. At Colorado Mesa University, we pride ourselves on the personal touch. Faculty offer one-on-one guidance for course selection, field placements, student teaching, and employment. Our mission is to develop Educators as Innovators; we are always looking to improve the quality of learning in our programs and K-12 schools.

As a student, you will gradually accumulate over 200 hours of classroom experience before beginning student teaching. School districts throughout western Colorado provide opportunities to gain experience with children of all ages and backgrounds in a variety of school settings.

The elementary licensure program provides teacher education candidates with a broad content knowledge and prepares them as teachers for grades kindergarten through six. A minimum of 60 credit hours of Essential Learning and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education elementary licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria. EDUC 115 and EDUC 215 must be taken before applying to the program.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

English Outcomes:
1. Express themselves effectively in a variety of forms. (Communication Fluency)
2. Support interpretive claims about a variety of texts. (Critical Thinking)
3. Identify the salient features of literary texts from a broad range of English and American literary periods. (Specialized Knowledge)
4. Employ knowledge of literary traditions to produce imaginative writing. (Communication Fluency/Applied Learning)
5. Use research to assist in problem-solving. (Critical Thinking)
6. Demonstrate knowledge of the history or structure of the English language. (Specialized Knowledge)

Teacher Education Outcomes:
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)
6. Instruct K-12 students based on self-written learning plans to address individual learning and developmental patterns in English. (Specialized Knowledge)
7. Design a safe and supportive learning environment for elementary and secondary education students. (Applied Learning)
Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 126 semester hours required for the BA in Liberal Arts, Elementary Education, English.
- 2.80 cumulative GPA or higher in all CMU coursework
- 2.80 cumulative GPA or higher in coursework toward the major content area
- A grade of "B" or better is required for all EDUC courses.
• Foreign language proficiency must be demonstrated by high school course work (2 years), college coursework (2 semesters), or competency testing.

• Students must pass the PRAXIS II exam in the content area prior to beginning the internship. All other coursework toward the degree must be successfully completed prior to the internship.

• A grade of “C” or better must be earned in all required courses, unless otherwise stated.

• ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215, MATH 105, and MATH 205 (all with a grade of “B” or better) and formal acceptance to the Teacher Education Program.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “B” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must be taken after MATH 105. Must receive a grade of “B” or better, must be completed by the time the student has 60 semester hours.)
- MATH 205 - Elements of Mathematics II

**Humanities** (3 semester hours)
- Select one Humanities course (3) (Essential Learning eligible ENGL or HIST course recommended)

**Social and Behavioral Sciences** (6 semester hours)
- PSYC 233 - Human Growth and Development (3) (Must earn a grade of “B” or higher)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one BIOL course (3)
- Select the corresponding BIOL lab (1)
- Select one GEOL course (3)

**History** (3 semester hours)
- Select one History course (3) (HIST 131 or HIST 132 recommended)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
BA: LIBERAL ARTS, ELEMENTARY EDUCATION, ENGLISH REQUIREMENTS (51 semester hours, must earn a grade of “C” or better in each course, unless otherwise noted.)

Elementary Education Core: (36 semester hours)

Literacy and Mathematics: (15 semester hours)
- ENGL 240 - Children’s Literature (3)
- ENGL 343 - Language Systems and Linguistic Diversity
- ENGL 451 - Understanding and Using English Grammar (3)
- MATH 105 - Elements of Mathematics I (3) (Must earn a grade of “B” or higher.)
- MATH 301 - Mathematics for Elementary Teachers (3)

Kinesiology (3 semester hours)
- KINE 321 - Physical Activity and Health in the Classroom (3)

Social Sciences (9 semester hours)
- POLS 101 - American Government (3)
- Select 2 of the following courses:
  - ANTH 202 - Introduction to Anthropology (3)
  - ARKE 205 - Principles of Archaeology (3) or ARKE 225 - Introduction to North American Archaeology (3)
  - ECON 201 - Principles of Macroeconomics (3)
  - GEOG 102 - Human Geography (3) or GEOG 103 - World Regional Geography (3)
  - HIST 101 - Western Civilizations (3)
  - HIST 102 - Western Civilizations (3)
  - HIST 131 - United States History (3)
  - HIST 132 - United States History (3)
  - HIST 225 - History of Colorado (3)
  - HIST 315 - American Indian History (3)
  - HIST 316 - American Slavery (3)
  - HIST 320 - The American West (3)
  - HIST 331 - The 20th Century (3)
  - HIST 344 - The Age of Industry in America (3)
  - HIST 345 - History of Immigration, Race, and Ethnicity in America (3)

Science (6 semester hours)
Select natural sciences courses from approved Essential Learning list or BIOL 209 or BIOL 210:
- ________________________________
- ________________________________

Art (3 semester hours)
- ARTD 410 - Elementary Art Education Methods (3)

Elementary Education Concentration: English (15 semester hours)

English Content Area Required Courses (6 semester hours)
- ENGL 210 - Introduction to Literary Studies (3)
- ENGL 245 - Imaginative Writing (3) or ENGL 250 - Introduction to Creative Writing (3)

Upper Division Literature Electives (6 semester hours)
Select two of the following courses:
- ENGL 301 - Classical Greek and Latin Literature (3)
- ENGL 311 - English Medieval Literature (3)
- ENGL 313 - English Renaissance Literature (3)
ENGL 314 - American Literature to 1830 (3)
ENGL 315 - American Literature 1830-1870 (3)
ENGL 316 - American Literature 1870-1900 (3)
ENGL 330 - Women in World Thought and Literature (3)
ENGL 335 - The Bible as Literature (3)
ENGL 355 - Shakespeare (3)
ENGL 365 - Literature for Young Adults (3)
ENGL 370 - Major Author (3)
ENGL 415 - American Literature 1900-1945 (3)
ENGL 416 - American Literature 1945-Present (3)
ENGL 418 - Ethnic Experiences in U.S. Literature (3)
ENGL 440 - History of the English Language (3)
ENGL 470 - 18th Century British Literature (3)
ENGL 471 - British Romanticism (3)
ENGL 475 - Victorian Literature (3)
ENGL 478 - 20th Century British Literature (3)

Upper Division English Elective (3 semester hours)
- Complete 3 semester hours from the following list:
  - ENGL 380 - Memoir and Creative Non-Fiction (3)
  - ENGL 381 - Creative Writing: Fiction (3)
  - ENGL 382 - Creative Writing: Crafting Fiction (3)
  - ENGL 383 - Creative Writing: Poetry (3)
  - ENGL 384 - The Art of the Essay (3)
  - ENGL 385 - Technical and Professional Writing (3)
  - ENGL 386 - Roots of Modern Rhetoric (3)
  - ENGL 387 - Literary Editing and Publishing (3)
  - ENGL 388 - Creative Writing: Crafting Poetry (3)
  - ENGL 390 - Introduction to Film Studies (3)
  - ENGL 395 - Independent Study (1-3)
  - ENGL 396 - Topics (1-3)
  - ENGL 415 - American Folklore (3)
  - ENGL 423 - Genre Studies (3)
  - ENGL 492 - Seminar in Writing (3)
  - ENGL 495 - Independent Study (1-3)
  - ENGL 496 - Topics (1-3)

ELEMENTARY EDUCATION REQUIREMENTS (38 semester hours, must earn a grade of "B" or better in each courses.) (840 field experience hours)
- EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
- EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
- EDUC 341 - Pedagogy and Assessment: K-6/Elementary (3) (20 field experience hours)
- EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
- EDUC 374 - Exceptional and English Language Learners in the Inclusive Classroom (3)
- EDUC 378 - Technology for K-12 Educators (1)
- EDUC 440 - Methods of Teaching Language and Literacy: Early Childhood (3) (40 field experience hours)
- EDUC 441 - Methods of Teaching Language and Literacy: Elementary (3) (80 field experience hours)
- EDUC 451 - Methods of Teaching Mathematics: Early Childhood/Elementary (3) (60 field experience hours)

2019-20 BA, Liberal Arts, Elementary Education, English (3291). Posted:
The following courses must be completed with a grade of B or better to progress through the program sequence:

- EDUC 461 - Methods of Teaching Science and Social Science: Early Childhood/Elementary (3)
- EDUC 471 - Educational Assessment for the K-12 Educator (1)
- EDUC 475 - Classroom Management for K-12 Educators (1)
- EDUC 499C - Teaching Internship and Colloquia: Elementary (12) (600 field experience hours)

Praxis II Exam Passed

All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must PASS the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.
# Suggested Course Sequencing

## Freshman Year, Fall Semester: 16 credits
- ENGL 111 - English Composition (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - Geology (3)
- Essential Learning - History (3)
- KINA Activity (1)
- POLS 101 – American Government (3)

## Freshman Year, Spring Semester: 17 credits
- EDUC 115 - What It Means to be an Educator (1)
- ENGL 112 - English Composition (3)
- Essential Learning - Humanities (3)
- Elementary Core - Natural Sciences (3)
- Essential Learning – Social and Behavioral Sciences (3)
- MATH 105 – Elements of Mathematics I (3)
- KINE 100 – Health and Wellness (1)

## Sophomore Year, Fall Semester: 16 credits
- Elementary Core - Social Sciences (3)
- ENGL 245 – Imaginative Writing (3) OR ENGL 250 – Introduction to Creative Writing (3)
- Essential Learning – Biology (3) and Biology Laboratory (1)
- MATH 205 – Elements of Mathematics II (3)
- PSYC 233 - Human Growth and Development (3)

## Sophomore Year, Spring Semester: 17 credits
- EDUC 215 - Teaching as a Profession (1)
- Elementary Core - Social Sciences (3)
- Elementary Core - Natural Science (3)
- ENGL 240 - Children's Literature (3)
- ESSL 200 - Essential Speech (1)
- ESSL 290 - Maverick Milestone (3)

## Junior Year, Fall Semester: 18 credits
- EDUC 341 - Pedagogy and Assessment: K-6/Elementary (3)
- EDUC 343 - Teaching to Diversity (3)
- ENGL 343 - Language systems and Linguistic Diversity (3)
- MATH 301 – Mathematics for Elementary Teachers (3)
- Upper Division English Content Courses (2 courses) (6)

## Junior Year, Spring Semester: 16 credits
- EDUC 374 - Exceptional and English Language Learners in the Inclusive Classroom (3)
- EDUC 378 - Technology for K-12 Educators (1)
- EDUC 440 - Methods of Teaching Language and Literacy: Early Childhood (3)
- ENGL 451 - Structure of the English Language (3)
- KINE 321 – Physical Activity and Health in the Classroom (3)
- Upper Division English Content Course (3)

## Senior Year, Fall Semester: 14 credits
- ARTO 410 - Elementary Art Education Methods (3)
- EDUC 441 - Methods of Teaching Language and Literacy: Elementary (3)
- EDUC 451 - Methods of Teaching Mathematics: Early Childhood/Elementary (3)
- EDUC 461 - Methods of Teaching Science and Social Science: Early Childhood/Elementary (3)
- EDUC 471 - Educational Assessment for the K-12 Educator (1)
- EDUC 475 - Classroom Management for K-12 Educators (1)

## Senior Year, Spring Semester: 12 credits
- EDUC 476 - Classroom Management for K-12 Educators (1)
• EDUC 499C - Teaching Internship and Colloquia: Elementary (12)
Program Modification

Spanish-Secondary Education: 3248

Degree Type: BA

Revision to program sheet: Yes ☑ No ☐

Description of modification:

1. Changing Program Outcomes for Center for Teacher Education.
2. Add program requirement about passing Praxis II prior to student teaching (internship) semester.

Justification:

1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.

Revision to SLOs: Yes ☑ No ☐

Teacher Education Program Outcomes:

1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☑ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentinally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:

The Languages, Literature, and Mass Communications Department and The Center for Teacher Education have both approved these changes as of January 29, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Arts
Major: Spanish
Concentration: Secondary Education

About This Major...
Spanish majors for secondary licensure study all aspects of the language and cultures of the Spanish-speaking world and its teaching, including linguistics, phonetics and phonology, foreign language teaching methods, and the literatures of Spain and Latin America.

The Center for Teacher Education offers a comprehensive program of study that leads to licensure in Colorado. Our professors are experienced, knowledgeable, accessible, and dedicated to the improvement of public education. At Colorado Mesa University, we pride ourselves on the personal touch. Faculty offer one-on-one guidance for course selection, field placements, student teaching, and employment. Our mission is to develop Educators as Innovators; we are always looking to improve the quality of learning in our programs and K-12 schools.

As a student, you will gradually accumulate over 200 hours of classroom experience before beginning student teaching. School districts throughout western Colorado provide opportunities to gain experience with children of various ages and backgrounds in a variety of school settings. A minimum of 75 credit hours of Essential Learning and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education secondary licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria. EDUC 115 and EDUC 215 must be taken before applying to the program.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

**Spanish Outcomes:**
1. Express themselves coherently in written and oral Spanish. (Communication)
2. Apply knowledge of the structure of the Spanish language, including syntax, phonetics/phonology, and morphology. (Specialized Knowledge)
3. Demonstrate an awareness and appreciation of important literary and artistic movements/works, and cultural aspects in relation to the Spanish-speaking world. (Specialized Knowledge)
4. Develop a research project focused on second language acquisition or teaching methodologies. (Critical Thinking)
5. Compare commonalities and differences between Hispanic and other U.S. cultures. (Critical Thinking)
6. Demonstrate knowledge of linguistic variations that exist in the Spanish-speaking world. (Specialized Knowledge)

**Teacher Education Outcomes:**
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)
6. Instruct K-12 students based on self-written learning plans to address individual learning and developmental patterns for Spanish language acquisition. (Specialized Knowledge)
7. Design a safe and supportive learning environment for elementary and secondary education students. (Applied Learning)
8. Apply Spanish content knowledge while working with learners to access information, apply knowledge in real world settings, assuring learner mastery of the content. (Specialized Knowledge)
10. Integrate assessment, planning, and instructional strategies in coordinated and engaging ways through multiple means of communication. (Critical Thinking/Communication Fluency)


Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at [http://www.coloradomesa.edu/registrar/graduation.html](http://www.coloradomesa.edu/registrar/graduation.html). If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.

The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.

See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.80 cumulative GPA or higher in all CMU coursework.
- 2.80 cumulative GPA or higher in coursework toward the major content area.
- All EDUC prefix courses must be completed with a grade of "B" or better to progress through the program sequence. Students must pass the PRAXIS II exam in the content area prior to beginning the internship. Also, all other coursework toward the degree must be successfully completed prior to the internship.
- A grade of "C" or better must be earned in all required foundation and major courses, unless otherwise stated.
• Any combination of FLAS 212, 301, 302, and 303 may also be used to satisfy the requirements of a major in which there exists a foreign language requirement.
• FLAV 496 and FLAS 422 may be taken more than once as long as the title/content of each course differs. Permission may be required to take some Topics courses. Check with the professor.
• Topics courses may be taken more than one time only if the course has a different topic.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of "B" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- PSYC 233 - Human Growth and Development (3) (must receive a grade of "B" or better)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (6 semester hours, must pass all courses with a grade of "C" or higher.)
Two consecutive classes in the same foreign language. FLAS 114 & 115 will NOT fulfill this requirement.
- ____________________________________________
- ____________________________________________

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2019-20 BA, Spanish, Secondary Education (3248). Posted:
BA, SPANISH, SECONDARY EDUCATION REQUIREMENTS (42 semester hours, must pass all courses with a grade of “C” or higher.)

Spanish Core (30 semester hours)
- FLAS 300 - Spanish Composition and Grammar (3)
- FLAS 304 - Advanced Oral Production and Composition (3)
- FLAS 305 - Advanced Spanish Grammar and Spanish English Contrasts (3)
- FLAS 311 - History and Culture of Spain (3)
- FLAS 312 - History and Culture of Latin America (3)
- FLAS 323 - Introduction to Hispanic Literature I (3)
- FLAS 324 - Introduction to Hispanic Literature II (3)
- FLAS 341 - Introduction to Hispanic Linguistics (3)
- FLAS 441 - Applied Phonetics and Phonology (3)
- FLAS 498 - Spanish Senior Practicum (3)

Hispanic Studies (3 semester hours)
- One of the following courses:
  - FLAS 424 - Advanced Hispanic Literature (3)
  - FLAS 446 - Spanish Language Variation (3)

Applied Studies (3 semester hours)
- One of the following courses:
  - FLAS 431 - Spanish for Medical and Social Services (3)
  - FLAS 433 - Spanish for the Professions (3)
  - FLAS 434 - Introduction to Translation (3)
  - FLAS 435 - Introduction to Interpreting (3)

Restricted Electives (6 semester hours)
Select two additional 300- or 400-level FLAS or FLAV courses:
- ______________________________________________________________
- ______________________________________________________________

SECONDARY EDUCATION REQUIREMENTS (29 semester hours)
Program Requirements: ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215 (all with a grade of “B” or better) and formal acceptance to the Teacher Education Program.
- EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
- EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3) (20 field experience hours)
- EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
- EDUC 442 - Integrating Literacy across the Curriculum: Secondary and K-12 Art (3) (60 field experience hours)
- EDUC 475 - Classroom Management for K-12 Educators (1)
- EDUC 497 - Content Methodology Practicum (3) (80 field experience hours)
- EDUC 497E - Methods of Teaching Secondary Spanish (2)
  This course is only offered in the fall semester. It may be taken with either the 300-level or 400-level EDUC courses but must be taken before the student teaching semester.
- EDUC 499G - Teaching Internship and Colloquia: Secondary (12) (600 field experience hours)

- Praxis II Exam Passed

All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must PASS the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.
**GENERAL ELECTIVES** (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 6 semester hours)

- ________________________________________________________
- ________________________________________________________
- ________________________________________________________
- ________________________________________________________
**SUGGESTED COURSE SEQUENCING**

**Freshman Year, Fall Semester: 16 credits**
- Foundation Course – Recommended: FLAS 211 - Second Year Spanish I (3)
- Essential Learning - Humanities (3)
- ENGL 111 - English Composition (3)
- Essential Learning - Natural Science (3)
- KINE 100 - Health and Wellness (1)
- General Elective (3)

**Freshman Year, Spring Semester: 15 credits**
- Foundation Course – Recommended: FLAS 213 - Spanish Conversation and Grammar (3)
- FLAS 300 - Spanish Composition and Grammar (3)
- ENGL 112 - English Composition (3)
- Essential Learning - History (3)
- MATH 110 - College Mathematics (3) or higher

**Sophomore Year, Fall Semester: 16 credits**
- FLAS 304 - Advanced Oral Production and Composition (3)
- FLAS 305 - Advanced Spanish Grammar and Spanish English Contrasts (3)
- PSYC 233 - Human Growth and Development (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - Natural Science with Lab (4)

**Sophomore Year, Spring Semester: 15 credits**
- EDUC 115 - What It Means to be an Educator (1)
- KINA Activity (1)
- Essential Learning - Social and Behavioral Sciences (3)
- FLAS 312 - History and Culture of Latin America (3)
- FLAS 324 - Introduction to Hispanic Literature II (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**Junior Year, Fall Semester: 16 credits**
- EDUC 215 - Teaching as a Profession (1)
- General Elective (3)
- FLAS 311 - History and Culture of Spain (3)
- FLAS 323 - Introduction to Hispanic Literature I (3)
- FLAS 341 - Introduction to Hispanic Linguistics (3)
- Hispanic Studies Elective (3)

**Junior Year, Spring Semester: 15 credits**
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3)
- EDUC 343 - Teaching to Diversity (3)
- FLAS 441 - Applied Phonetics and Phonology (3)
- Restricted Electives (2 courses) (6)

**Senior Year, Fall Semester: 15 credits**
- EDUC 442 - Integrating Literacy Across the Curriculum: Secondary and K-12 Art (3)
- EDUC 475 - Classroom Management for K-12 Educators (1)
- EDUC 497 - Content Methodology Practicum (3)
- EDUC 497E - Methods of Teaching Secondary Spanish (2)
- FLAS 498 - Spanish Senior Practicum (3)
- Applied Studies Elective (3)

**Senior Year, Spring Semester: 12 credits**
- EDUC 499G - Teaching Internship and Colloquia: Secondary (12)

2019-20 BA, Spanish, Secondary Education (3248). Posted:
Program Modification

Music Education K-12: 3282

Degree Type: BME

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Add program requirement about passing Praxis II prior to student teaching (internship) semester.

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education’s Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.

Revision to SLOs: Yes ☑ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☑ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:
The Music Department and The Center for Teacher Education have both approved these changes as of January 29, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
About This Major . . .

The Music Education K-12 degree provides students with the knowledge, skills, and musicianship to become a successful music educator. Studies in music theory, history, literature, ensemble performance, and applied study give the student a strong foundation on which to build a successful teaching career. Classes in conducting, instrumental, choral, and elementary techniques develop the skills and knowledge needed for a rewarding career as a K-12 educator. These skills and knowledge are applied during field experiences as well as during the student teaching internship.

As a student, you will gradually accumulate over 200 hours of classroom experience before beginning student teaching. School districts throughout western Colorado provide opportunities to gain experience with children of all ages and backgrounds in a variety of school settings.

A minimum of 75 credit hours of Essential Learning and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education secondary licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html

In addition to these institutional outcomes, graduates of this major must be able to:

**Music Education Outcomes:**
1. Develop and express music judgments through solo performances (Intellectual Skills - Critical Thinking)
2. Identify current national and state music education standards (Specialized Knowledge)
3. Demonstrate strategies associated with teaching general music curricula (Specialized Knowledge)
4. Conduct research on a specialized topic in music that results in a well-organized document or oral presentation (Intellectual Skills – Communication Fluency)
5. Demonstrate teaching techniques in an instrumental or vocal setting (Specialized Knowledge)

**Teacher Education Outcomes:**
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)
6. Instruct K-12 students based on self-written learning plans to address individual learning and developmental patterns in Music (Specialized Knowledge)
7. Design a safe and supportive learning environment for elementary and secondary education students. (Applied Learning)
8. Apply Music content knowledge while working with learners to access information in real-world settings assuring learner mastery of the content. (Specialized Knowledge)
9. Integrate assessment, planning, and instructional strategies in coordinated and engaging way through multiple means of communication. (Critical Thinking/Communication Fluency)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS
- 126 semester hours required for the BME in Music Education K-12.
- 2.80 cumulative GPA or higher in all CMU coursework.
- 2.80 cumulative GPA or higher in coursework toward the major content area.
- Must pass all foundation and major courses with a grade of “C” or better.
- All EDUC prefix courses must be completed with a grade of “B” or better.
- Students must pass the PRAXIS II exam in the content area prior to beginning the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.
- Students must meet departmental recital/concert attendance requirements.
- Students deficient in piano skills will be required to complete MUSA 130 (2), MUSA 131 (2), MUSA 230 (2), MUSA 231 (2), in the first two years.
- Some Essential Learning credits will have to be completed in the junior year.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of “B” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

Humanities (3 semester hours)
- Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
- PSYC 233 - Human Growth and Development (3) (must receive a grade of "B" or better)
- Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

History (3 semester hours)
- Select one History course (3)

Fine Arts (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (23 semester hours, must pass all courses with a “C” or better)
- MUSA 111 - Music Technology (1)
- MUSA 114 - Music Theory I - Introduction (3)
- MUSA 115 - Music Theory II - Diatonic Concepts (3)
- MUSA 116 - Ear Training and Sightsinging I (2)
- MUSA 117 - Ear Training and Sightsinging II (2)
- MUSA 214 - Music Theory III - Chromatic Concepts (3)
- MUSA 215 - Music Theory IV - Twentieth Century Form and Analysis (3)
- MUSL 1___ - Music Lesson (1)
- MUSL 2___ - Music Lesson (1)
- MUSP 1___ - Music Performance (1)
- MUSP 1___ - Music Performance (1)

BME, MUSIC EDUCATION, K-12 REQUIREMENTS (66 semester hours, must pass all courses with a "C" or better)

**Music Core (25 semester hours)**
- MUSA 101 - Concert Attendance (0)
- MUSA 101 - Concert Attendance (0)
- MUSA 101 - Concert Attendance (0)
- MUSA 101 - Concert Attendance (0)
- MUSA 101 - Concert Attendance (0)
- MUSA 101 - Concert Attendance (0)
- MUSA 250 - Beginning Conducting (2)
- MUSA 268 - Beginning Jazz Improvisation (1) *(MUSA 268 is for Instrumental and Keyboard students only)*
- One of the following courses:
  - MUSA 302 - Keyboard Literature I (3)
  - MUSA 303 - Symphonic Literature (3)
  - MUSA 304 - Keyboard Literature II (3)
  - MUSA 319 - Choral Literature (3)
- MUSA 317 - Applied Orchestration and Arranging (2)
- MUSA 326 - Music History and Literature I (3)
- MUSA 327 - Music History and Literature II (3)
- MUSA 426 - The Music of World Cultures (2)
- MUSP 365 - Opera Workshop (1) *(MUSP 365 is for Vocal students only)*

**Music Education K-12 Requirements (24 semester hours)**

**Option 1: Instrumental and Keyboard Focus**
- MUSA 137 - Class Voice I (1)
- MUSA 232 - String Pedagogy and Materials (2)
- MUSA 233 - Woodwind Pedagogy and Materials (2)
- MUSA 234 - Brass Pedagogy and Materials (2)
- MUSA 235 - Percussion Pedagogy and Materials (2)
- MUSA 240 - Introduction to Music Education (2) (30 field experience hours)
- MUSA 340 - Teaching Elementary and General Music (3) (30 field experience hours)
- One of the following courses (2 semester hours):
  - MUSA 350A - Advanced Conducting: Choral (2)
  - MUSA 350B - Advanced Conducting: Instrumental (2)
- MUSA 440 - Teaching Vocal Music K-12 (3) (35 field experience hours)
- MUSA 441 - Teaching Instrumental Music K-12 (3) (35 field experience hours)
- One of the following courses (2 semester hours):
  - MUSA 442A - Teaching Special Ensembles: Choral (2) (30 field experience hours)
  - MUSA 442B - Teaching Special Ensembles: Instrumental (2) (30 field experience hours)

**Option 2: Vocal Focus**
Choose two of the following (4 semester hours):
- MUSA 232 - String Pedagogy and Materials (2)
- MUSA 233 - Woodwind Pedagogy and Materials (2)
MUSA 234 - Brass Pedagogy and Materials (2)
MUSA 235 - Percussion Pedagogy and Materials (2)
☐ ______________________________________
☐ ______________________________________
☐ MUSA 337 - Singer's Diction 1: English and German (1)
☐ MUSA 410 - Vocal Pedagogy (3)
☐ MUSA 437 - Singer's Diction 2: Italian and French (1)
☐ MUSA 240 - Introduction to Music Education (2) (30 field experience hours)
☐ MUSA 340 - Teaching Elementary and General Music (3) (30 field experience hours)
☐ One of the following courses (2 semester hours):
   MUSA 350A - Advanced Conducting: Choral (2)
   MUSA 350B - Advanced Conducting: Instrumental (2)
☐ MUSA 440 - Teaching Vocal Music K-12 (3) (35 field experience hours)
☐ MUSA 441 - Teaching Instrumental Music K-12 (3) (35 field experience hours)
☐ One of the following courses (2 semester hours):
   MUSA 442A - Teaching Special Ensembles: Choral (2) (30 field experience hours)
   MUSA 442B - Teaching Special Ensembles: Instrumental (2) (30 field experience hours)

K-12 Licensure Requirements (17 semester hours, must be completed with a grade of "B" or better)
Program Requirements: ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215 (all with a grade of "B" or better) and formal acceptance to the Teacher Education Program
☐ EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
☐ EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
☐ EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
☐ EDUC 499D - Teaching Internship and Colloquia: Elementary (6) (300 field experience hours)
☐ EDUC 499H - Teaching Internship and Colloquia: Secondary (6) (300 field experience hours)

☐ Praxis II Exam Passed

All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must pass the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.
SUGGESTED 8-SEMESTER COURSE SEQUENCING

(It is highly suggested to take summer and J-term courses to finish the degree in this time frame. Most students require remedial piano courses to meet their piano proficiency requirement as well.)

Freshman Year, Fall Semester: 18 credits
- MUSA 101 - Concert Attendance (0)
- MUSL 1___ - Music Lesson (1)
- MUSP 1___ - Music Performance (1)
- MUSA 114 - Music Theory I - Introduction (3)
- MUSA 116 - Ear Training and Sightsinging I (2)
- MUSA 111 - Music Technology (1)
- ENGL 111 - English Composition (3)
- KINE 100 - Health and Wellness (1)
- PSYC 233 - Human Growth and Development (3)
- Essential Learning - Natural Science (3)

Freshman Year, Spring Semester: 14 credits
- MUSA 101 - Concert Attendance (0)
- MUSL 1___ - Music Lesson (1)
- MUSP 1___ - Music Performance (1)
- MUSA 115 - Music Theory II - Diatonic Concepts (3)
- MUSA 117 - Ear Training and Sightsinging II (2)
- ENGL 112 - English Composition (3)
- KINA Activity (1)
- Essential Learning - Social and Behavioral Science (3)

Sophomore Year, Fall Semester: 19-20 credits
- MUSA 101 - Concert Attendance (0)
- MUSL 2___ - Music Lesson (1)
- MUSP 2___ - Music Performance (1)
- MUSA 214 - Music Theory III - Chromatic Concepts (3)
- MUSA 240 - Introduction to Music Education (2)
- MUSA 232 - String Pedagogy and Materials (2) OR MUSA 233 - Woodwind Pedagogy and Materials (2)
- MUSA 268 - Beginning Jazz Improvisation (1) (for instrumental and keyboard students only)
- MATH 110 - College Mathematics (3) or higher
- Essential Learning - Natural Science with Lab (4)
- Essential Learning - Fine Arts (3)

Sophomore Year, Spring Semester: 20 credits
- MUSA 101 - Concert Attendance (0)
- MUSL 2___ - Music Lesson (1)
- MUSP 2___ - Music Performance (1)
- MUSA 215 - Music Theory IV - Twentieth Century Form and Analysis (3)
- Essential Learning - Humanities (3)
- MUSA 234 - Brass Pedagogy and Materials (2) OR MUSA 235 - Percussion Pedagogy and Materials (2)
- MUSA 250 - Beginning Conducting (2)
- MUSA 3___ - Symphony, Keyboard, OR Choral Literature (3)
- MUSA 4___ - Instrumental OR Vocal Methods K-12 (3)
- EDUC 115 - What It Means to be an Educator (1)
- EDUC 215 - Teaching as a Profession (1)
Junior Year, Fall Semester: 15-16 credits
- MUSA 101 - Concert Attendance (0)
- MUSL 3__ - Music Lesson (1)
- MUSP 3__ - Music Performance (1)
- MUSA 233 - Woodwind Pedagogy and Materials (2) or MUSA 232 - String Pedagogy and Materials (2) (3rd and 4th semesters of Pedagogy and Materials for Instrumental and Keyboard students only)
- MUSA 340 - Teaching Elementary Music (3) OR MUSA 442 - Teaching Special Ensembles (2)
- MUSA 337 - Diction 1, English and German (1) (for vocal students only)
- MUSA 350 - Advanced Conducting (2)
- MUSA 326 - Music History and Literature I (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

Junior Year, Spring Semester: 15-17 credits
- MUSA 101 - Concert Attendance (0)
- MUSL 3__ - Music Lesson (1)
- MUSP 3__ - Music Performance (1)
- MUSA 235 - Percussion Pedagogy and Materials (2) OR MUSA 234 - Brass Pedagogy and Materials (2) (3rd and 4th semesters of Pedagogy and Materials for Instrumental and Keyboard students only)
- MUSA 426 - The Music of World Cultures (2)
- MUSA 327 - Music History and Literature II (3)
- MUSA 4__ - Instrumental OR Vocal Methods (3)
- MUSA 437 - Diction 2, Italian and French (1) (for vocal students only)
- MUSA 410 – Vocal Pedagogy (Vocal students only) (3)
- EDUC 343 - Teaching to Diversity (3)

Senior Year, Fall Semester: 11-13 credits
- MUSA 101 - Concert Attendance (0)
- MUSL 4__ - Music Lesson (1)
- MUSP 4__ - Music Performance (1)
- Essential Learning - History (3)
- MUSA 317 - Orchestration (2)
- MUSA 137 - Class Voice (1) (for instrumental and keyboard students only)
- MUSA 442 - Teaching Special Ensembles (2) OR MUSA 340 - Teaching Elementary Music (3)
- MUSP 420 - Senior Recital/Presentation (1)
- MUSP 365 or 465 - Opera Workshop or Opera Performance (Vocal students only) (1)

Senior Year, Spring Semester: 12 credits
- MUSA 101 - Concert Attendance (0)
- EDUC 499D - Student Teaching Internship (6)
- EDUC 499H - Student Teaching Internship (6)
SUGGESTED 9-SEMESTER COURSE SEQUENCING

(It is highly suggested to take summer and J-term courses to finish the degree in this time frame. Most students require remedial piano courses to meet their piano proficiency requirement as well.)

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<td>• MUSA 116 - Ear Training and Sightsinging I (2)</td>
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- MUSA 350 - Advanced Conducting (2)
- MUSA 326 - Music History and Literature I (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**Junior Year, Spring Semester: 13-15 credits**
- MUSA 101 - Concert Attendance (0)
- MUSL 3___ - Music Lesson (1)
- MUSP 3___ - Music Performance (1)
- MUSA 235 - Percussion Pedagogy and Materials (2) OR MUSA 234 - Brass Pedagogy and Materials (2) (3rd and 4th semesters of Pedagogy and Materials for instrumental and keyboard students only)
- MUSA 426 - The Music of World Cultures (2)
- MUSA 327 - Music History and Literature II (3)
- MUSA 4___ - Instrumental OR Vocal Methods (3)
- EDUC 343 - Teaching to Diversity (3)

**Senior Year, Fall Semester: 12-15 credits**
- MUSA 101 - Concert Attendance (0)
- MUSL 4___ - Music Lesson (1)
- MUSP 4___ - Music Performance (1)
- MUSA 340 - Teaching Elementary Music (3) OR MUSA 442 - Teaching Special Ensembles (2)
- Essential Learning - History (3)
- MUSA 317 - Orchestration (2)
- MUSA 137 - Class Voice (1) (for instrumental and keyboard students only)
- MUSA 442 - Teaching Special Ensembles (2) OR MUSA 340 - Teaching Elementary Music (3)
- MUSA 337 - Diction 1, German and English (1) (for vocal students only)
- MUSP 365 or 465 - Opera Workshop or Opera Performance (Vocal students only) (1)

**Senior year, Spring Semester: 12-13 credits**
- MUSA 101 - Concert Attendance (0)
- MUSL 4___ - Music Lesson (1)
- MUSP 4___ - Music Performance (1)
- MUSA 437 - Diction 2, Italian and French (1) (for vocal students only)
- MUSA 3___ - Symphonic, Keyboard, OR Choral Literature (3)
- MUSA 4___ - Instrumental OR Vocal Methods K-12 (3)
- MUSA 410 - Vocal Pedagogy (Vocal students only) (3)
- MUSP 420 - Senior Recital/Presentation (1)

**Fifth Year, Fall Semester: 12 credits**
- EDUC 499D - Student Teaching Internship (6)
- EDUC 499H - Student Teaching Internship (6)
Department: PES

Course Additions

ENVS 373  
Credit Hours  3

Course Title: Climate Change Adaptation
Abbreviated Title: Climate Change Adaptation

Contact hours per week: Lecture 3 Lab Field Studio Other
Type of Instructional Activity: Lecture

Academic engagement minutes: 2250  
Student preparation minutes: 4500

Intended semesters for offering this course: Fall ☐ J-Term ☐ Spring ☑ Summer ☐
Intended semester to offer course 1st time: Spring 2020

Number of times course may be taken for credit: 1

Essential Learning Course: Yes ☑ No ☐

Prerequisites: Yes ☑ No ☐

Prerequisite for other course(s): Yes ☑ No ☐

Co-requisites: Yes ☑ No ☐

Requirement or listed choice for any program of study: Yes ☑ No ☐

PES BS, Environmental Science and Technology: 3443

Overlapping content with present courses offered on campus: Yes ☑ No ☐

Additional faculty FTE required: Yes ☑ No ☐

Additional equipment required: Yes ☑ No ☐

Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:
Climate change vulnerability and adaptation strategies in natural resource management. Includes the scientific basis of climate change and assessing the exposure, sensitivity, and adaptive capacity of species and ecosystems to climate change.

Justification:
This course will expose students to emerging theory and practices that are increasingly being used in natural resource management to prepare for and adjust to current and future climate changes. In addition, this course also fulfills the following Environmental Science Program Student Learning Objectives:
Specialized knowledge: Demonstrate an understanding of terminology, concepts, theories, and practices in environmental science.
Critical thinking: Identify and evaluate assumptions, hypotheses, alternative views on environmental problems, then articulate implications and form conclusions.
Communication skills: Construct an organized argument (oral and written) supported by current research on a technical issue in environmental science appropriate for a specialized audience.
Applied learning: Complete a field-based project that evaluates and proposes a solution for a local problem or need by effectively synthesizing applicable concepts from environmental science and related disciplines.
Course Additions

ENVS204 Ecosystem Management is proposed as a prerequisite so students will have a basic understanding of current models of natural resource management. ENVS101 or ENVS104, which are prerequisites for ENVS204, provide students with a basic understanding of environmental science and an introduction to climate change science. The focus of this course is climate change adaptation techniques, as opposed to climate change mitigation techniques (many of which are presented in ENVS370 Renewable Energy). Also, the focus of this course is adaptation for natural areas (national forests and parks, for example) as opposed to adaptation for the built environment (human communities and infrastructure).

Topical course outline:

Scientific basis of climate change
Global carbon cycle and role in climate change
Climate adaptation cycle and climate vulnerability assessments
Climate change exposure
Climate sensitivity of organisms, habitats, ecosystems, and global cycles
Adaptive capacity of organisms, habitats, ecosystems, and global cycles
Resistance, resilience, and transition strategies for adaptation
Uncertainty in decision making
Communicating climate change science
Climate change mitigation and policy

Student Learning Outcomes:

1. Explain the scientific basis of climate change
2. Assess the biological and ecological impacts of climate change
3. Conduct a climate change vulnerability assessment
4. Apply options for climate adaptation to a specific scenario
5. Effectively communicate climate change impacts and adaptation to various audiences

Discussions with affected departments:

Discussed proposed course with Department Head of Biological Sciences (2/12/19) and we agreed it may be of interest to Biology majors as an upper division general elective.

Proposed by: Deborah Kennard

Expected Implementation: Fall 2019
Course Additions

ENVS 376  
Course Title: Ecological Design and Technology  
Abbreviated Title: Ecological Design & Technology  
Credit Hours: 3  
Contact hours per week: Lecture 3  
Type of Instructional Activity: Lecture  
Academic engagement minutes: 2250  
Student preparation minutes: 4500  
Intended semesters for offering this course: Fall  
Intended semester to offer course 1st time: Fall 2020  
Number of times course may be taken for credit: 1  
Essential Learning Course: Yes  
Prerequisites: Yes  
Prerequisite for other course(s): Yes  
Co-requisites: Yes  
Requirement or listed choice for any program of study: Yes  
Overlapping content with present courses offered on campus: Yes  
Additional faculty FTE required: Yes  
Additional equipment required: Yes  
Additional lab facilities required: Yes  
Course description for catalog:  
Examination of ecosystem-based technology to benefit both humans and the environment. Topics covered include the philosophy of ecological design and technology, relevant ecological principles, and ecological technologies including treatment wetlands, anaerobic digesters, algal flow ways, ecological treatment systems, rain gardens, green walls, and green roofs.  

Justification:  
Students will be exposed to technologies that rely on ecosystems to carry out functions such as wastewater treatment, reducing energy needs of buildings, and/or nutrient capture from eutrophic water. These sustainable technologies offer much-needed alternatives to conventional methods that are generally not ecologically sound and highly reliant on fossil fuel.  

This course also fulfills the following Environmental Science Program Student Learning Outcomes:  
1.) Specialized knowledge: Demonstrate an understanding of terminology, concepts, theories, and practices in environmental science.  
2.) Quantitative skills, critical thinking skills: Demonstrate the ability to analyze quantitative environmental data, effectively translate data into graphs or tables, and interpret the results.  
3.) Critical thinking: Identify and evaluate assumptions, hypotheses, alternative views on environmental problems, then articulate implications and form conclusions.  
4.) Communication skills: Construct an organized argument (oral and written) supported by current research on a technical issue in environmental science appropriate for a specialized audience.  
5.) Applied learning: Complete a field-based project that evaluates and proposes a solution for a local problem or need by effectively synthesizing applicable concepts from environmental science and related
Course Additions
disciplines.

CHEM 121 is selected as pre-requisite because understanding basic chemical concepts (for instance, concepts on oxidation-reduction, precipitation) are needed to understand how these technologies/ecosystems function.

ENVS 204 is selected as pre-requisite because students in class need to have a basic understanding of ecology and current issues and concepts associated with natural resource management.

Algebraic calculations are needed for math-based topics covered in this class, making MATH 113 an important pre-requisite.

Topical course outline:
- Philosophy of Ecological Design and Technology
- Biogeochemical cycling
- Organics
- Wetlands and treatment wetlands
- Anaerobic digesters
- Ecological treatment systems
- Algal flow ways
- Rain gardens
- Green walls
- Green roofs

Student Learning Outcomes:
1.) Explain the philosophy behind ecological design and technology
2.) Explain the fundamentals of various ecological technologies, including their functions and complications
3.) Design a field-based ecological technology
4.) Effectively communicate their proposed ecological technology to various audiences through presentations and reports
5.) Effectively work in groups to complete an ecological technology project

Discussions with affected departments:
ENVS is the only program within PES affected by this addition. PES is the only affected department

Proposed by: Freddy Witarsa
Expected Implementation: Fall 2019
### Course Additions

**ENVS 377**  
**Course Title:** Systems Thinking in Environmental Science  
**Abbreviated Title:** Systems Thinking in Env Sci  

<table>
<thead>
<tr>
<th>Contact hours per week:</th>
<th></th>
<th>Lab</th>
<th>Field</th>
<th>Studio</th>
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<tr>
<td><strong>Lecture</strong></td>
<td>3</td>
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<tr>
<td>Academic engagement minutes:</td>
<td>2250</td>
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- **Type of Instructional Activity:** Lecture
- **Student preparation minutes:** 4500
- **Intended semesters for offering this course:** Fall ☐, J-Term ☐, Spring ☑, Summer ☐
- **Intended semester to offer course 1st time:** Spring 2020
- **Number of times course may be taken for credit:** 1
- **Essential Learning Course:** Yes ☑, No ☐
- **Prerequisites:** Yes ☑, No ☐  
  - ENVS 204; MATH 113
- **Prerequisite for other course(s):** Yes ☑, No ☐
- **Co-requisites:** Yes ☑, No ☐
- **Requirement or listed choice for any program of study:** Yes ☑, No ☐
  - PES BS, Environmental Science and Technology: 3443
  - PES Prof Cert, Sustainability Practices: 1464
- **Overlapping content with present courses offered on campus:** Yes ☑, No ☐
- **Additional faculty FTE required:** Yes ☑, No ☐
- **Additional equipment required:** Yes ☑, No ☐
- **Additional lab facilities required:** Yes ☑, No ☐

#### Course description for catalog:

Exploration of systems thinking as an approach to environmental issues. Topics covered include the meaning of systems and systems thinking, examining systems using the “triple P” framework (people, planet, profit), drawing system diagrams, conducting life cycle assessment and eMergy analysis to quantify environmental impacts, and modeling systems.

#### Justification:

The growing complexity of current environmental issues requires us to approach these issues using a holistic and non-linear way of thinking. Systems thinking is one such tool that students can use to approach these problems.

In this course, students will learn the following: 1) what it means to approach problems using systems thinking; 2) methods to view a process or system comprehensively and use environmental accounting techniques, including eMergy analysis and LCA, to quantify the environmental impacts of these processes (LCA has been used by companies such as Siemens and Levi Strauss to quantify the sustainability of their products); and 3) how to create models for environmental systems. Understanding these techniques allows students to understand the underlying cause for events observed in systems, approach environmental issues comprehensively, and come up with solutions that are more sustainably sound.

This course also fulfills the following Environmental Science Program Student Learning Outcomes:

1.) Specialized knowledge: Demonstrate an understanding of terminology, concepts, theories, and practices in environmental science.
Course Additions

2.) Quantitative skills, critical thinking skills: Demonstrate the ability to analyze quantitative environmental data, effectively translate data into graphs or tables, and interpret the results.
3.) Technology skills: Demonstrate the ability to use appropriate tools, technology, and methods for measuring and analyzing environmental data.
4.) Critical thinking: Identify and evaluate assumptions, hypotheses, alternative views on environmental problems, then articulate implications and form conclusions.
5.) Communication skills: Construct an organized argument (oral and written) supported by current research on a technical issue in environmental science appropriate for a specialized audience.
6.) Applied learning: Complete a field-based project that evaluates and proposes a solution for a local problem or need by effectively synthesizing applicable concepts from environmental science and related disciplines.

Students taking this class need to have an understanding of current issues and concepts associated with natural resource management and ENVS 204, as a pre-requisite, covers these topics. MATH 113 is also selected as a pre-requisite because students will need an understanding of algebra to understand and create models.

Topical course outline:

- Fundamentals of systems thinking
- System diagrams
- eMergy (with an "m"; derived from embodied energy) analysis to quantify environmental impacts of systems and processes
- Life cycle assessment (LCA) to quantify environmental impacts of systems and processes
- Modeling systems

Student Learning Outcomes:

1.) Evaluate environmental problems and solutions in a holistic manner
2.) Construct system diagrams and identify different components within a system
3.) Apply environmental accounting techniques, which include eMergy and life cycle assessment (LCA)
4.) Create and use models to understand behaviors of environmental systems
5.) Effectively communicate the complexity of environmental issues and solutions through presentations and reports

Discussions with affected departments:

ENVS is the only affected program within PES affected by the addition. PES is the only affected department.

Proposed by: Freddy Witarsa  
Expected Implementation: Fall 2019
Course Additions

PHYS 372  Credit Hours  3

Course Title:  General Relativity

Contact hours per week:  Lecture 3  Lab  Field  Studio  Other

Type of Instructional Activity:  Lecture

Academic engagement minutes:  2250  Student preparation minutes:  4500

Intended semesters for offering this course:  Fall  ☑  J-Term  □  Spring  ☑  Summer  □

Intended semester to offer course 1st time:  Spring 2021

Number of times course may be taken for credit:  1

Essential Learning Course:  Yes  ☑  No  □

Prerequisites:  Yes  ☑  No  □

PHYS 230, MATH 236 or MATH 260

Prerequisite for other course(s):  Yes  ☑  No  □

Co-requisites:  Yes  ☑  No  □

Requirement or listed choice for any program of study:  Yes  ☑  No  □

PES  BS, Physics: 3471

Overlapping content with present courses offered on campus:  Yes  ☑  No  □

Additional faculty FTE required:  Yes  ☑  No  □

Additional equipment required:  Yes  ☑  No  □

Additional lab facilities required:  Yes  ☑  No  □

Course description for catalog:

Introduction to Einstein's theory of general relativity. Newtonian gravitation and Einstein's theory of special relativity reviewed. Topics may include spherically symmetric stars, static and rotating black holes, FRW cosmologies, gravitational waves, and wormholes.

Justification:

The physics major was modified a couple of years ago to include 'restricted electives', where a physics major must choose two courses from a restricted list of eligible courses. This proposed course has been determined by the Physics Program to be a useful addition to this category of restricted electives. It is noted that PHYS 396 - Topics: General Relativity has been offered twice within the last couple of years, both in spring 2017 and spring 2019. In spring 2017 and spring 2019, the enrollment amounted to 7 and 9 students, respectively.

Topical course outline:

- Gravitational Physics
- Geometry as Physics
- Space, Time, and Gravity in Newtonian Physics
- Principles of Special Relativity
- Special Relativistic Mechanics
- Gravity as Geometry
- The Description of Curved Spacetime
- Geodesics
- The Geometry Outside a Spherical Star
- Gravitational Collapse and Black Holes
- The Universe Observed
- Cosmological Models
Course Additions

Student Learning Outcomes:
1. Use Gauss' Law for gravitation to obtain the gravitational field of various mass distributions.
2. Show that the Lorentz transformations are invariant under Lorentz boosts.
3. Relate observations in different frames of reference using time dilation, length contraction, Lorentz transformations, and spacetime diagrams.
4. Transform between different coordinate systems by performing a coordinate transformation.
5. Construct a two-dimensional embedding diagram for a given spacetime geometry.
6. Construct the geodesic equation for a given spacetime geometry including that of a spherically-symmetric spacetime.
7. Solve the Friedmann-Robertson-Walker field equations subjected to a linear equation of state.

Discussions with affected departments:
PES programs were consulted. All OK'd the addition.

Proposed by: Chad Middleton
Expected Implementation: Fall 2019
Course Deletions

ENVS 212L  Credit Hours  1

Course Title:  Environmental Health and Safety Laboratory

Essential Learning Course:  Yes  ☑  No  ☐

Requirement or listed choice for any program of study:  Yes  ☑  No  ☐

PES  BS,  Environmental Science and Technology:  3443

Prerequisite for other course(s):  Yes  ☑  No  ☐

Co-requisite for other course(s):  Yes  ☑  No  ☐

ENVS 212

Justification:

ENVS 212L, Environmental Health and Safety Laboratory, has not been offered for a number of years in conjunction with ENVS 212, Environmental Health and Safety, which has been offered. Students were just given a waiver for the 212L component of the course. The waiver is the arrangement for this semester, Spring 2019, as well. The waiver process has occurred for students at least back to Spring 2015 and probably prior to that. We are trying to solve this problem for the long-term by deleting the course instead of the short-term which was granting waivers.

Proposed by:  Tamera Minnick  Expected Implementation:  Fall 2019
Course Modifications

ENVS 212

Intended semester to offer modified course for the 1st time: Spring 2020

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<tr>
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<td>1</td>
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<tr>
<td>Co-requisites:</td>
<td>Current: ENVS 212L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proposed: none</td>
<td></td>
</tr>
<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes ☑ No ☐</td>
<td></td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes ☑ No ☐</td>
<td></td>
</tr>
</tbody>
</table>

PES BS, Environmental Science and Technology: 3443

Justification:

We have proposed deletion of ENVS 212L, Environmental Health and Safety Laboratory, in order to solve the problem of it not being offered for the past few years. Instead, students were granted waivers individually for ENVS 212L. ENVS 212L was a co-requisite for ENVS 212, and deleting this co-requisite aligns the course details with our current practice of waiving their requirement of ENVS 212L.

Discussions with affected departments:

N/A

Proposed by: Tamera Minnick

Expected Implementation: Fall 2019
Course Modifications

PHYS 252

Intended semester to offer modified course for the 1st time: Spring 2020

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Prefix:</strong> PHYS</td>
<td><strong>Instructor:</strong> Hybrid Courses</td>
</tr>
<tr>
<td><strong>Course No.:</strong> 252</td>
<td><strong>Lab:</strong> 4</td>
</tr>
<tr>
<td><strong>Credit Hours:</strong> 2</td>
<td><strong>Field:</strong></td>
</tr>
<tr>
<td><strong>Course Title:</strong> Intermediate Laboratory</td>
<td><strong>Studio:</strong></td>
</tr>
<tr>
<td><strong>Contact hours:</strong> Lecture 4</td>
<td><strong>Other:</strong></td>
</tr>
<tr>
<td><strong>Engage Min.:</strong> 3000</td>
<td><strong>Instr. Activity:</strong> Laboratory: Academic/Clinical</td>
</tr>
<tr>
<td><strong>Prep Min.:</strong> 1500</td>
<td><strong>Proposed:</strong></td>
</tr>
<tr>
<td><strong>Times for Credit:</strong> 1</td>
<td><strong>Current:</strong></td>
</tr>
<tr>
<td>Requirement or listed choice for any program of study: Yes</td>
<td><strong>Proposed:</strong></td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements: Yes</td>
<td><strong>Yes</strong> No</td>
</tr>
</tbody>
</table>

PES BS, Physics: 3471

**Justification:**

We would like to add writing beyond that which can be expected for a two credit hour laboratory course. We also plan to cover the error analysis portion of the course in a formal lecture setting. During the last three to five years the writing component of this course has increased substantially and has reached the point where the time required by students outside of the class is well in excess of the current student preparation minutes. The writing in this course covers reports on experiments that students have done in the course and it should synthesize the technicalities of the physics theory and details of the experiments into a form digestible by readers whose physics knowledge matches that of their peers. Separately the course has a component that deals with the theory of error analysis. This would function more reasonably in a lecture setting. We would add one contact hour per week to the course and this would be devoted to lectures covering error analysis and exercises in scientific writing. The course would meet twice a week for with a typical class meeting consisting of about 25 minutes of lecture and 105 minutes of laboratory work.

**NOTE:** Mixed Methods is not an available Instructional Activity option in the dropdown. This course is actually a Mixed Methods course; however, Hybrid is the closest available option in this field.

Topical course outline, current:

None exists, to the best of my knowledge.

Topical course outline, proposed:

1. Error analysis:
   a. Errors in measured quantities.
   b. Propagation of errors.
   c. Probability distributions of measured outcomes.
   d. Weighted averaging.
   e. Least squares fitting.
2. Selected physics experiments:
   a. Experimental design.
   b. Manage and troubleshoot laboratory apparatus.
Course Modifications

To the best of my knowledge, there are no current student learning outcomes that have been approved for this course.

Physics: The physics faculty have discussed this proposal and agree with it.

Other departments: No other programs require this course.

Proposed by: David Collins

Expected Implementation: Fall 2019

Student Learning Outcomes, current:

Discussions with affected departments:

Physics: The physics faculty have discussed this proposal and agree with it.

Other departments: No other programs require this course.

Proposed by: David Collins

Expected Implementation: Fall 2019
Course Modifications

PHYS 311

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
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<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
<td>311</td>
</tr>
<tr>
<td>Credit Hours:</td>
<td>3</td>
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<tr>
<td>Course Title:</td>
<td>Electromagnetic Theory I</td>
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<tr>
<td>Times for Credit:</td>
<td>1</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>Current: PHYS132/132L and MATH 260 or MATH 236</td>
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<tr>
<td></td>
<td>Proposed: MATH 253; and MATH 260 or MATH 236; and PHYS 230 or PHYS 231</td>
</tr>
<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes ☑ No No</td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes ☑ No No</td>
</tr>
</tbody>
</table>

PES BS Physics: 3471

Justification:

300 level physics courses are a very large jump in conceptual difficulty and work load from 100 level physics courses. Currently, without any 200 level physics course requirement, students may take this course without first completing a 200 level physics course. While it is uncommon for students to enroll in this course without first taking either PHYS 230 (Intermediate Dynamics) or PHYS 231 (Modern Physics), students that do enroll without first taking a 200 level physics course are very underprepared for the conceptual difficulty of this course. The original motivation for only requiring PHYS 132/132L (Electromagnetism and Optics) was that this course does not engage any specific concepts from either PHYS 230 or PHYS 231. However, the problem-solving skills gained from either PHYS 230 or PHYS 231 warrant making either PHYS 230 or PHYS 231 a prereq for this course. PHYS 230 or PHYS 231 provides an additional, but necessary, transitional step in work load from 100 level to 300 level physics courses that the 200 level math courses do not provide. Either PHYS 230 or PHYS 231 will adequately prepare students for this course.

In addition, this class requires heavy use of vector calculus and differential equations. Currently the only math pre-requisite is MATH 236 (Differential Equations and Linear Algebra) or MATH 260 (Differential Equations) which are the two differential equations courses offered by the Math Program. Vector calculus is covered in MATH 253 (Calculus III) and although students typically take MATH 253 prior to MATH 260 or MATH 236, MATH 253 is not a prerequisite for either differential equations class. Thus it is possible that students may enroll in PHYS 311 without first taking MATH 253.

This course is the only 300 level physics course without a 200 level physics course requirement. This proposed change will bring it in line with all other 300 level physics courses.

Because both PHYS 230 and 231 require PHYS 132/132L, this prerequisite becomes redundant if PHYS 230 or PHYS 231 becomes the prerequisite and thus can be removed.

Discussions with affected departments:

The proposed change does not affect any other departments. For students pursuing a minor in Physics, PHYS 230 or 231 are already required for the minor, and thus the change does not increase any course requirements for the minor.

Currently, it is possible that a student pursuing the CU engineering degree could enroll in PHYS 311 as an...
Course Modifications

elective without previously completing PHYS 230 or PHYS 231, but this is an extremely unlikely scenario. No
CU students have ever taken PHYS 311 as an elective unless the student is also pursuing the Physics minor,
in which the student would satisfy the PHYS 230 or PHYS 231 prerequisite. This change modification was
presented to the Head of the Engineering Department, and he indicated that they have no issue with the
change.

Proposed by:  Brian Hosterman

Expected Implementation:  Fall 2019
**Course Modifications**

**PHYS 331**

Intended semester to offer modified course for the 1st time: Spring 2020

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
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<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
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<tr>
<td>Credit Hours:</td>
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<td>Course Title:</td>
<td>Advanced Laboratory I</td>
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<tr>
<td>Contact hours:</td>
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<td>Lecture</td>
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<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Instr. Activity:</td>
<td>Laboratory: Academic/Clinical</td>
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<tr>
<td>Engage Min.:</td>
<td>3000</td>
</tr>
<tr>
<td>Prep Min.:</td>
<td>1500</td>
</tr>
<tr>
<td>Times for Credit:</td>
<td>1</td>
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<tr>
<td>Requirement or listed choice for any program of study:</td>
<td>Yes</td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes</td>
</tr>
</tbody>
</table>

PES BS, Physics: 3471

**Justification:**

We would like to add writing beyond that which can be expected for a two credit hour laboratory course. During the last three to five years the writing component of this course has increased substantially and has reached the point where the time required by students outside of the class is well in excess of the current student preparation minutes. We would add one contact hour per week to the course and this would be devoted to in-class writing exercises and group work. From recent Teacher to Teacher seminars, it is evident that in-class, small exercises can positively impact the writing proficiency of the students. These exercises would be focused on writing relevant to writing in physics: abstracts, experimental procedures and methods, data and error analysis, etc. The writing in this course covers reports on experiments that students have done in the course and it should synthesize the technicalities of the physics theory and details of the experiments into a form digestible by readers whose physics knowledge matches that of their peers. Because the course already requires substantial time commitment to the students outside of class, these in-class writing activities would not require additional time outside of class. The design of these activities would be to give the students exercises that are immediately applicable to the large writing assignments completed outside of class, which are already a component of the class. The course would meet twice a week for with a typical class meeting consisting of about 25 minutes of lecture and 105 minutes of laboratory work.

**Topical course outline, current:**

None currently known

**Topical course outline, proposed:**

1. Scientific Writing:
   a. Summarize experiment and results into concise abstract.
   b. Create an introductory narrative that describes importance of experiment and summarizes relevant peer-review literature relevant to experiment.
   c. Transcribe experimental methods into organized, cohesive narrative.

Note: Mixed Methods is not an available Instructional Activity option in the dropdown. This course is actually a Mixed Methods course; however, Hybrid is the closest available option in this field.
Course Modifications

- Transcribe experimental results into organized, cohesive narrative.
- Write appropriate captions for figures and graphs.

2. Selected experiments:
   - Experimental design.
   - Manage and troubleshoot laboratory apparatus.
   - Analysis of measured data.
   - Error analysis of measured data.

3. Communication:
   - Maintaining laboratory journals.
   - Writing scientific reports based on experience conducting and analyzing the actual experiment.
   - Presentations to group of peers.

Student Learning Outcomes, current:
None currently known.

Student Learning Outcomes, proposed:

1. Design experimental procedures and set up experiments that test physical phenomena.
2. Apply theoretical ideas from the major branches of physics to analyze physical phenomena observed in the laboratory.
3. Set up, use and troubleshoot laboratory apparatus.
4. Maintain a detailed, organized laboratory journal.
5. Analyze data and perform error analysis using standard statistically meaningful techniques.
6. Produce laboratory reports in the style of scientific journal articles.
7. Present findings of experiments orally.

Discussions with affected departments:
Physics: The physics faculty have discussed this proposal and agree with it.
Other departments: No other programs require this course.

Proposed by: David Collins
Expected Implementation: Fall 2019
Program Modification

Environmental Science and Technology: 3443

Degree Type: BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1. Add ENVS 377 Systems Thinking in Environmental Science as a Core Environmental Science Course
2. Remove ENVS 212L Environmental Health and Safety Laboratory from Option 1: Pollution Monitoring and Control and from the list of Restricted Electives
3. Modify ENVS 212 to remove ENVS 212L as a co-requisite
4. Change ENVS 340 Atmospheric Science from a Core Environmental Science Course to a requirement under Option 1: Pollution Monitoring and Control and to a Restricted Elective
5. Add ENVS 376 Ecological Design and Technology as a Restricted Elective
6. Add ENVS 373 Climate Change Adaptation as a Restricted Elective

Justification:
1. ENVS 377 Systems Thinking in Environmental Science is a new course developed by Dr. Freddy Witarsa who was hired to strengthen ENVS course offerings in systems thinking and sustainability of the built environment, as recommended by the last formal review of the ENVS program.
2. ENVS 212L Environmental Health and Safety Laboratory has not been taught for a number of years in conjunction with ENVS 212 Environmental Health and Safety. Students were just given a waiver for the course. This is the arrangement for this semester, Spring 2019, as well.
3. ENVS 212 Environmental Health and Safety is being modified to reflect the removal of the lab since the reality is this course was taught but not the lab for a number of years.
4. To keep the number of Core hour requirements the same, ENVS 377 Systems Thinking in Environmental Science will replace ENVS 340 Atmospheric Science. There are three pollution related courses and only one ecosystem restoration related course among ENVS Core courses, so replacing one of the pollution related courses would help balance ENVS Core requirements. ENVS 340 is the only pollution related core course that is not a pre-requisite for other ENVS courses. However, students pursuing Option 1: Pollution Monitoring and Control should be exposed to at least one atmospheric sciences course so it should be required for this option. With the removal of ENVS212L Environmental Health and Safety Laboratory (modification #2), this will also more closely balance the required credit hours for Option 1 (16 hours) and Option 2 (15 hours). ENVS 340 Atmospheric Sciences will be additionally listed as a Restricted Elective so that students pursuing Option 2 would be able to use it as a Restricted Elective. Most of the ENVS courses in one of the options is also listed as a Restricted Elective.
5. ENVS 376 Ecological Design and Technology is a new course developed to strengthen the ENVS program’s offerings in sustainability of the built environment.
6. ENVS 373 Climate Change Adaptation is a new course developed to introduce students to the growing field of climate change adaptation and will be useful for students interested in managing natural resources.

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☑ No ☐

The proposed new courses (ENVS 376, Ecological Design, and ENVS 377, Systems Thinking in Environmental Science) strengthen course offerings in systems thinking and sustainability of the built environment. These new courses and the other changes proposed do not change ENVS student learning outcomes or any of the other program characteristics listed above.

Discussions with affected departments:
Discussed the addition of ENVS373 with the Department of Biology chair (2/12/19); agreed this course may be of interest to Biology majors as an upper division general elective.

Proposed by: Deborah Kennard

Director of Teacher Education Signature:
Program Modification

Expected Implementation: Fall 2019
Degree: Bachelor of Science
Major: Environmental Science and Technology

About This Major . . .
We educate students in the science, protection, and restoration of our natural resources—air, water, land, and ecosystems. Students develop a foundation in biology, chemistry, mathematics, statistics, and communication skills, then apply this knowledge to the study and solution of environmental problems. We balance theory with hands-on practice, and include considerable work outdoors in our spectacular local environment. Students choose either the Pollution Monitoring & Control option, which focuses on pollution prevention as well as investigation and cleanup, or the Ecosystem Restoration option, which focuses on strategies for managing natural resources. Students complete the program with our Capstone course, in which they work in small groups on real-life projects for an off-campus client. Each group plans and implements a project and presents the final results to its client. In addition to providing students with a chance to showcase the knowledge and abilities they have acquired through their studies, students learn how to deal with the challenges of real-life project work.

Our graduates take positions as environmental professionals with consulting firms, industry, and government agencies (e.g., U.S. Bureau of Land Management, U.S. Geological Survey, and U.S. Army Corps of Engineers). Some continue their studies in graduate school (e.g., Colorado School of Mines, Colorado State University, University of Denver).

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Demonstrate an understanding of terminology, concepts, theories, and practices in environmental science. (Specialized Knowledge)
2. Demonstrate the ability to design an environmental study. (Applied Learning)
3. Demonstrate the ability to analyze quantitative environmental data, effectively translate data into graphs or tables, and interpret results. (Quantitative Fluency)
4. Demonstrate the ability to use appropriate tools, technology, and methods for measuring and analyzing environmental data. (Applied Learning)
5. Identify and evaluate assumptions, hypotheses, and alternative views on environmental problems, then articulate implications and form conclusions. (Critical Thinking)
6. Construct an organized argument (oral and written) supported by current research on a technical issue in environmental science appropriate for a specialized audience. (Communication Fluency)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.

Register for all needed courses and complete all requirements for each degree sought. Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- A “C” or higher is required in all courses listed as foundation and major requirements.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 113 - College Algebra (4*)
  
*3 credits apply to the Essential Learning requirements and 1 credit applies to elective credit

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (9-10 semester hours, must pass all courses with a grade of “C” or higher)
Complete all courses in one of the following options:

**Option One:**
- CHEM 121 - Principles of Chemistry (4)
- CHEM 121L - Principles of Chemistry Laboratory (1)
- CHEM 123 - Introduction to Environmental Chemistry (4)

**Option Two** (recommended for students who plan to attend graduate school):
- CHEM 131 - General Chemistry I (4)
- CHEM 131L - General Chemistry I Laboratory (1)
- CHEM 132 - General Chemistry II (4)
- CHEM 132L - General Chemistry II Laboratory (1)

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2019-20 BS, Environmental Science and Technology (3443). Posted:
BS, ENVIRONMENTAL SCIENCE AND TECHNOLOGY REQUIREMENTS (57 semester hours, must pass all courses with a grade of “C” or higher)

Introduction to Environmental Science (3-4 semester hours)
Complete all courses in one of the following options:

Option 1:
- ENVS 104 - Environmental Science: Global Sustainability (3)

Option 2:
- ENVS 101 - Introduction to Environmental Science (3)
- ENVS 105 - Readings in Environmental Science (1)

Core Environmental Science Courses (23-25 semester hours)
- ENVS 204 - Introduction to Ecosystem Management (3)
- ENVS 204L - Introduction to Ecosystem Management Laboratory (1)
- ENVS 221 - Science and Technology of Pollution Control (3)
- ENVS 221L - Science and Technology of Pollution Control Laboratory (1)
- ENVS 331 - Water Quality (3)
- ENVS 331L - Water Quality Laboratory (1)
- ENVS 340 - Applied Atmospheric Science (3)
- ENVS 340L - Applied Atmospheric Science Laboratory (1)
- ENVS 377 - Systems Thinking in Environmental Science (3)
- ENVS 492 - Capstone in Environmental Science and Technology (2)
- STAT 200 - Probability and Statistics (3)
- One of the following courses:
  - MATH 146 - Calculus for the Biological Sciences (5)
  - MATH 151 - Calculus I (5)
  - ENVS 475 - Experimental Design and Statistical Analysis in Environmental Science (3)

Environmental Science Options (145-156 semester hours)
Complete all courses in one of the following options:

Option 1: Pollution Monitoring and Control:
- ENVS 212 - Environmental Health and Safety (2)
- ENVS 212L - Environmental Health and Safety Laboratory (1)
- ENVS 340 - Applied Atmospheric Science (3)
- ENVS 410 - Environmental Regulatory Compliance (3)
- ENVS 420 - Pollution Investigation and Monitoring (3)
- ENVS 420L - Pollution Investigation and Monitoring Laboratory (1)
- GEOL 111 - Physical Geology (3)
- GEOL 111L - Physical Geology Laboratory (1)

Option 2: Ecosystem Restoration:
- ENVS 312 - Soil Science and Sustainability (3)
- ENVS 312L - Soil Science and Sustainability Laboratory (1)
- ENVS 455 - Restoration Ecology (3)
- ENVS 455L - Restoration Ecology Laboratory (1)
- POLS 488 - Environmental Politics (3)
- BIOL 107 - Principles of Plant Biology (3)
- BIOL 107L - Principles of Plant Biology Laboratory (1)
**Restricted Electives** (12-126 semester hours)

Select from the following additional ENVS or GIST courses to bring total credits for this section to 57:

ENVS 212 - Environmental Health and Safety (2)
ENVS 278 - Permaculture Design (2)
ENVS 278L - Permaculture Design Laboratory (1)
ENVS 301 - Environmental Project Management (2)
ENVS 312 - Soil Science and Sustainability (3)
ENVS 312L - Soil Science and Sustainability Laboratory (1)
ENVS 315 - Mined Land Rehabilitation (2)
ENVS 321 - Environmental Risk Analysis (3)
ENVS 337 - Stream Biomonitoring (2)
ENVS 340 - Applied Atmospheric Science (3)
ENVS 350 - Ecology and Management of Shrublands and Grasslands (3)
ENVS 350L - Ecology and Management of Shrublands and Grasslands Laboratory (1)
ENVS 354 - Forest Ecology and Management (3)
ENVS 360 - Fire Ecology (3)
ENVS 360L - Fire Ecology Laboratory (1)
ENVS 370 - Renewable Energy (3)
ENVS 373 - Climate Change Adaptation (3)
ENVS 374 - Sustainable Building (3)
ENVS 376 - Ecological Design and Technology (3)
ENVS 394 - Natural Resources of the West (1)
ENVS 395 - Topics (1-3)
ENVS 413 - Environmental Fate and Transport of Contaminants (3)
ENVS 420 - Pollution Investigation and Monitoring (3)
ENVS 420L - Pollution Investigation and Monitoring Laboratory (1)
ENVS 431 - Water and Wastewater Treatment (3)
ENVS 433 - Restoration of Aquatic Systems (3)
ENVS 455 - Restoration Ecology (3)
ENVS 455L - Restoration Ecology Laboratory (1)
ENVS 460 - Fire Management (3)
ENVS 460L - Fire Management Laboratory (1)
ENVS 475 - Experimental Design and Statistical Analysis in Environmental Science (3)
ENVS 496 - Topics (1-3)
ENVS 497 - Structured Research (1-3)
GIST 332 - Introduction to Geographic Information Systems (2)
GIST 332L - Introduction to Geographic Information Systems Laboratory (1)

**GENERAL ELECTIVES** (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 16-17 semester hours)

MATH 113 - College Algebra (1)

2019-20 BS, Environmental Science and Technology (1443). Posted:
SUGGESTED COURSE SEQUENCING: POLLUTION MONITORING AND CONTROL

Freshman Year, Fall Semester: 15 credits
- ENGL 111 - English Composition (3)
- MATH 113 - College Algebra (4)
- ENVS 104 - Environmental Science: Global Sustainability (3)
- Essential Learning - Natural Science with Lab (4)
- KINE 100 - Health and Wellness (1)

Freshman Year, Spring Semester: 16 credits
- GEOL 111 - Physical Geology (3) and GEOL 111L - Physical Geology Laboratory (1)
- ENGL 112 - English Composition (3)
- STAT 200 - Probability and Statistics (3)
- Essential Learning - Social and Behavioral Science (3)
- Essential Learning - Natural Science (3)

Sophomore Year, Fall Semester: 14 credits
- CHEM 121/121L - Principles of Chemistry and Laboratory (5) or CHEM 131/131L - General Chemistry I and Laboratory (5)
- ENVS 204 - Introduction to Ecosystem Management (3) and ENVS 204L - Intro to Ecosystem Management Laboratory (1)
- Restricted Elective (1)
- Essential Learning - Fine Arts (3)
- KINA Activity (1)

Sophomore Year, Spring Semester: 16-17 credits
- CHEM 132/132L - General Chemistry II and Laboratory (5) or CHEM 123 - Introduction to Environmental Chemistry (4)
- MATH 146 - Calculus for the Biological Sciences (5) or MATH 151 - Calculus I (5)
- Essential Learning - Social and Behavioral Sciences (3)

Junior Year, Fall Semester: 14 credits
- Restricted Electives (3)
- ENVS 331 - Water Quality (3) and ENVS 331L - Water Quality Laboratory (1)
- Essential Learning - Humanities (3)
- ESSL 200 - Essential Speech (1)
- ESSL 290 - Maverick Milestone (3)

Junior Year, Spring Semester: 15-16 credits
- ENVS 212 - Environmental Health and Safety (2) and ENVS 212L - Environmental Health and Safety Laboratory (1)
- ENVS 340 - Applied Atmospheric Science (3)
- ENVS 410 - Environmental Regulatory Compliance (3)
- Restricted Electives (3)
- Essential Learning - History (3)

Senior Year, Fall Semester: 14-15 credits
- Restricted Electives (6-7)
- General Electives (7-8)

Senior Year, Spring Semester: 15 credits
- ENVS 377 - Systems Thinking in Environmental Science (3)
- ENVS 492 - Capstone in Environmental Science and Technology (2)
- ENVS 420 - Pollution Investigation/Monitoring (3) and ENVS 420L - Pollution Investigation/Monitoring Laboratory (1)
- General Electives (5-6)

2019-20 BS, Environmental Science and Technology (1443). Posted:

393
SUGGESTED COURSE SEQUENCING: ECOSYSTEM RESTORATION

Freshman Year, Fall Semester: 15 credits
- ENGL 111 - English Composition (3)
- MATH 113 - College Algebra (4)
- ENVS 104 - Environmental Science: Global Sustainability (3)
- Essential Learning - Natural Science with Lab (4)
- KINE 100 - Health and Wellness (1)

Freshman Year, Spring Semester: 16 credits
- BIOL 107 - Principles of Plant Biology (3) and BIOL 107L - Principles of Plant Biology Laboratory (1)
- ENGL 112 - English Composition (3)
- STAT 200 - Probability and Statistics (3)
- Essential Learning - Social and Behavioral Science (3)
- Essential Learning - Natural Science (3)

Sophomore Year, Fall Semester: 14 credits
- CHEM 121/121L - Principles of Chemistry and Laboratory (5) or CHEM 131/131L - General Chemistry I and Laboratory (5)
- ENVS 204 - Introduction to Ecosystem Management (3) and ENVS 204L - Intro to Ecosystem Management Laboratory (1)
- Restricted Elective (1)
- Essential Learning - Fine Arts (3)
- KINA Activity (1)

Sophomore Year, Spring Semester: 16-17 credits
- ENVS 221 - Science and Technology of Pollution Control (3) and ENVS 221L - Pollution Control Laboratory (1)
- CHEM 132/132L - General Chemistry II and Laboratory (5) or CHEM 123 - Introduction to Environmental Chemistry (4)
- MATH 146 - Calculus for the Biological Sciences (5) or MATH 151 - Calculus I (5)
- Essential Learning - Social and Behavioral Sciences (3)

Junior Year, Fall Semester: 15 credits
- ENVS 312 – Soil Science and Sustainability (3) and ENVS 312L - Soils and Sustainability Laboratory (1)
- ENVS 331 - Water Quality (3) and ENVS 331L - Water Quality Laboratory (1)
- Essential Learning - Humanities (3)
- ESSL 200 - Essential Speech (1)
- ESSL 290 - Maverick Milestone (3)

Junior Year, Spring Semester: 14 credits
- Restricted Electives (5)
- ENVS 340 - Applied Atmospheric Science (3)
- ENVS 377 - Systems Thinking in Environmental Science (3)
- POLS 488 - Environmental Politics (3)
- Essential Learning - History (3)

Senior Year, Fall Semester: 14-15 credits
- Restricted Electives (7)
- General Electives (7-8)

Senior Year, Spring Semester: 15 credits
- ENVS 492 - Capstone in Environmental Science and Technology (2)
- ENVS 455 - Restoration Ecology (3) and ENVS 455L - Restoration Ecology Laboratory (1)
- General Electives (9)
Program Modification

Physics: 3471

Degree Type: BS

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1) Change of credit hours for two courses, PHYS 252 (Intermediate Laboratory) and PHYS 331 (Electromagnetic Theory I) in the Physics Requirements category, from 2 hours to 3 hours.
2) Add a new course: PHYS 372 (General Relativity)
3) Clean up the preamble.

Justification:
1) We propose changing the credit hours for two courses (PHYS 252 and PHYS 331). The new program sheet needs to reflect these modifications.
2) We propose adding a new course PHYS 372 (General Relativity) to the list of restricted electives. The physics major was modified a couple of years ago to include 'restricted electives', where a physics major must choose two courses from a restricted list of eligible courses. This proposed course has been determined by the Physics Program to be a useful addition to this category of restricted electives. Additionally this course has been taught three times previously as a topics course and can no longer be offered in that format.

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☐ No ☑

Discussions with affected departments:
Physics (PES) - 1/18/2019 - all program members are in favor of the changes.
Engineering - 2/12/2019 - department does not object to changes.

Proposed by: David Collins

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Major . . .

Physics is the study of the universe: what it is made of and how it works, ranging from stars and galaxies to atoms and nuclei and everything in between. Physics forms the foundation of many technical fields including electronics and optics. Physics also features prominently in many of the hottest areas of current research and innovation, such as the multidisciplinary fields of nanotechnology and biophysics.

The physics program serves as a foundation for a wide array of careers. Physics majors from Colorado Mesa University have gone on to graduate programs in physics, astrophysics, chemistry, materials science, aerospace engineering, electrical engineering, and to medical school. They have also gone directly into jobs in engineering, business, and research. Over the last ten years Colorado Mesa physics majors have gone to graduate schools at the University of Colorado Boulder, University of Utah, Purdue University in physics and related fields, and Washington State University.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Show fluency with the major fields of physics (classical mechanics, electromagnetism, statistical physics, and quantum theory). (Specialized Knowledge)
2. Use mathematical representations to analyze physical scenarios. (Quantitative Fluency)
3. Use laboratory techniques to investigate experimentally physical phenomena. (Applied Learning)
4. Communicate effectively about topics in physics. (Communication Fluency)
5. Execute a project which addresses a significant and complex issue in physics. This project will integrate knowledge and techniques from different areas of physics. (Specialized Knowledge/Applied Learning)

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.00 cumulative GPA or higher in coursework toward the major content area.
- A “C” or higher is required in all foundation and major courses.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 151 - Calculus I (5)
  3 credits apply to the Essential Learning requirements and 2 credits apply to elective credit

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (14 semester hours, must earn a grade of “C” or better in all courses)
- Select one of the following options:
  - CSCI 111 - Foundations of Computer Science (4)
  - CSCI 110 - Beginning Programming (3) and CSCI 110L - Beginning Programming Laboratory (1)
- PHYS 131 - Fundamental Mechanics (4)
- PHYS 131L - Fundamental Mechanics Laboratory (1)
- PHYS 132 - Electromagnetism and Optics (4)
- PHYS 132L - Electromagnetism and Optics Laboratory (1)
BS, PHYSICS REQUIREMENTS (520-534 semester hours, must pass all courses with a grade of “C” or higher)

Core (464-475 semester hours)
- PHYS 230 - Intermediate Dynamics (3)
- PHYS 231 - Modern Physics (3)
- PHYS 251 - Electronics for Scientists (3)
- PHYS 252 - Intermediate Laboratory (32)
- PHYS 311 - Electromagnetic Theory I (3)
- PHYS 321 - Quantum Theory (3)
- PHYS 331 - Advanced Laboratory I (32)
- PHYS 342 - Advanced Dynamics (3)
- PHYS 362 - Statistical and Thermal Physics (3)
- PHYS 482 - Senior Research (1)
- PHYS 494 - Physics Seminar (1)
- MATH 152 - Calculus II (5)
- MATH 253 - Calculus III (4)
- One of the following courses:
  - MATH 260 - Differential Equations (3)
  - MATH 236 - Differential Equations and Linear Algebra (4)
- MATH 360 - Methods of Applied Mathematics (3)

Restricted Electives (6 semester hours)
Select two courses from the following list. PHYS 396/496 may be taken more than once so long as the topic is not repeated.
- PHYS 312 - Electromagnetic Theory II (3)
- PHYS 396 - Topics (3)
- PHYS 3XX72 – General Relativity (3)
- PHYS 422 - Quantum Theory II (3)
- PHYS 441 - Solid State Physics (3)
- PHYS 471 - Computational Physics I (3)
- PHYS 472 - Computational Physics II (3)
- PHYS 473 - Modern Optics (3)
- PHYS 496 - Topics (3)

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 168-179 semester hours; 123-144 hours of upper division may be needed.)
- MATH 151 - Calculus I (2)
- MATH 152 - Calculus II (5)
- MATH 253 - Calculus III (4)
- MATH 260 - Differential Equations (3)
- MATH 236 - Differential Equations and Linear Algebra (4)
- MATH 360 - Methods of Applied Mathematics (3)
- MATH 472 - Computational Physics II (3)
- PHYS 312 - Electromagnetic Theory II (3)
- PHYS 396 - Topics (3)
- PHYS 3XX72 – General Relativity (3)
- PHYS 422 - Quantum Theory II (3)
- PHYS 441 - Solid State Physics (3)
- PHYS 471 - Computational Physics I (3)
- PHYS 472 - Computational Physics II (3)
- PHYS 473 - Modern Optics (3)
- PHYS 496 - Topics (3)
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 16 credits
- PHYS 131 - Fundamental Mechanics (4) and PHYS 131L - Fundamental Mechanics Laboratory (1)
- MATH 151 - Calculus I (5)
- Essential Learning - Humanities (3)
- ENGL 111 - English Composition (3)

Freshman Year, Spring Semester: 16 credits
- PHYS 132 - Electromagnetism and Optics (4) and PHYS 132L - Electromagnetism and Optics Laboratory (1)
- MATH 152 - Calculus II (5)
- ENGL 112 - English Composition (3)
- Essential Learning - History (3)

Sophomore Year, Fall Semester: 15 credits
- PHYS 230 - Intermediate Dynamics (3)
- PHYS 251 - Electronics for Scientists (3)
- MATH 253 - Calculus III (4)
- KINA Activity (1)
- CSCI 111 - Foundations of Computer Science (4) or CSCI 110 and CSCI 110L - Beginning Programming (4)

Sophomore Year, Spring Semester: 165-176 credits
- PHYS 231 - Modern Physics (3)
- PHYS 252 - Intermediate Laboratory (3)
- MATH 260 - Differential Equations (3) or MATH 236 - Differential Equations and Linear Algebra (4)
- Essential Learning - Social and Behavioral Sciences (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

Junior Year, Fall Semester: 154 credits
- PHYS 311 - Electromagnetic Theory I (3)
- PHYS 342 - Advanced Dynamics (3)
- PHYS 331 - Advanced Laboratory I (32)
- MATH 360 - Methods of Applied Mathematics (3)
- Essential Learning - Social and Behavioral Sciences (3)

Junior Year, Spring Semester: 16 credits
- PHYS 321 - Quantum Theory I (3)
- PHYS 362 - Statistical and Thermal Physics (3)
- Essential Learning - Natural Science with Lab (4)
- Essential Learning - Fine Arts (3)
- General Elective (3)

Senior Year, Fall Semester: 14 credits
- Restricted Elective (3)
- PHYS 482 - Senior Research (1)
- PHYS 494 - Physics Seminar (1)
- General Electives (9)

Senior Year, Spring Semester: 13-14 credits
- Restricted Elective (3)
- KINE 100 - Health and Wellness (1)
- Essential Learning - Natural Science (3)
- PHYS 482 - Senior Research (1)
- PHYS 494 - Physics Seminar (1)
- General Electives (4-5)
Program Modification

Sustainability Practices: 1464

Degree Type: Prof Cert

Revision to program sheet: Yes ☑ No ☐

Description of modification:
Adding ENVS 376 (Ecological Design and Technology) and ENVS 377 (Systems Thinking in Environmental Science) to the list of elective classes that can be taken by students to fulfill their Professional Certificate in Sustainability Practices requirements.

Justification:
Program changes allow the addition of a course that exposes students to alternative technologies that are more ecologically sound and less reliant on fossil fuel. ENVS 376 covers principles of technologies that are ecosystem-based and relies on solar and waste energy to carry out functions such as wastewater treatment, reducing energy needs of buildings, and/or nutrient capture from eutrophic water. These technologies can provide benefits to humans while promoting environmental preservation and/or restoration.

Program changes allow the addition of a course (ENVS 377, Systems Thinking in Environmental Science) that exposes students to a different mental mode of thinking and techniques to approach environmental issues. The growing complexity of current environmental issues requires us to approach these issues using a holistic and a non-linear way of thinking. Systems thinking is one such tool that students can use to approach these problems. In this course, students will learn the following: 1) what it means to evaluate problems using systems thinking; 2) methods to view a process or system comprehensively and use environmental accounting techniques, including eMergy analysis (with an "m"; derived from embodied energy) and life cycle assessment (LCA), to quantify the environmental impacts of these processes (LCA has been used by companies such as Siemens and Levi Strauss to quantify the sustainability of their products); and 3) how to create models for environmental systems. Understanding these techniques allows students to understand the underlying cause for events observed in systems, evaluate environmental issues holistically, and come up with solutions that are more sustainably sound.

Revision to SLOs: Yes ☑ No ☐

Other changes: Yes ☑ No ☐

These modifications do not substantially change the program’s student learning outcomes or goals, but strengthens the program by introducing two new course options that allow students to learn how they can apply and implement sustainable principles, tools, and technologies in the community. In particular, the introduction of these courses expand the sustainable technologies, design, and tools covered in the original elective courses offered (Permaculture Design, Sustainable Building, and Renewable Energy) to include sustainable technologies for wastewater treatment, nutrient removal from water bodies, and reduction of building energy needs (ENVS 376). The addition of ENVS 377 also cover techniques to quantify environmental impacts of systems and evaluate sustainability issues in a holistic manner (ENVS 377).

Discussions with affected departments:
NA

Proposed by: Freddy Witarsa

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Major . . .
“Sustainability” is a way of living that meets the needs of the present without compromising the ability of future generations to meet their own needs. In order to achieve sustainability, we must examine our approach to energy, food, shelter, transportation, and other aspects of everyday life. Can we continue our current approach indefinitely? What changes need to occur to make our approach sustainable? What can we do to make those changes?

Through the Certificate in Sustainability Practices, students learn the principles of sustainability along with specific ways to implement them. Anyone seeking to understand and practice this approach will benefit from completion of the program. For some, the program can serve as a first step toward a more in-depth knowledge that may lead to a career. Earning this certificate helps professionals to improve their business practices and community leaders to understand trends in community planning. Any citizen will learn ways to improve the environment through their personal choices.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a certificate. Some courses are critical to complete in specific semesters while others may be moved around. Meeting with an academic advisor is essential in planning courses and discussing the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended certificate.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a certificate and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their certificate requirements (for one semester certificates complete in the first week of class):

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL CERTIFICATE REQUIREMENTS
The following institutional requirements apply to all CMU professional certificates. Specific programs may have different requirements that must be met in addition to institutional requirements.

- Consists of 5-59 semester hours.
- Primarily 300-400 level courses.
- At least fifty percent of the credit hours must be taken at CMU.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Certificate Requirements.
- The Catalog Year determines which program sheet and certificate requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC CERTIFICATE REQUIREMENTS

- 9 semester hours for the Professional Certificate in Sustainability Practices.
- A “C” or better must be achieved in coursework toward major content area.
- Either ENVS 104 or ENVS 101 may be taken for credit, but not both.

PROFESSIONAL CERTIFICATE: SUSTAINABILITY PRACTICES REQUIREMENTS (9 semester hours)

Core Classes (3 semester hours)
- Complete one of the following courses:
  - ENVS 104 - Environmental Science: Global Sustainability (3)
  - ENVS 101 - Introduction to Environmental Science (3)

Restricted Electives (6 semester hours)
Select 6 hours of electives from the following list approved by department head:
- ENVS 278 - Permaculture Design (2) and ENVS 278L - Permaculture Design Laboratory (2)
- ENVS 370 - Renewable Energy (3) or GEOL 370 - Renewable Energy (3)
- ENVS 374 - Sustainable Building (3)
- ENVS 376 – Ecological Design and Technology (3)
- ENVS 377 – Systems Thinking in Environmental Science (3)
- ENVS _______________________________
- ENVS _______________________________
- ENVS _______________________________
Program Modification

Geosciences-Secondary Education: 3474

Degree Type: BS

Revision to program sheet: Yes ☒ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Add program requirement about passing Praxis II prior to student teaching (internship) semester.
3. All other changes approved by UCC. The above are additional changes.

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.

Revision to SLOs: Yes ☒ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☒ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:

At the time of this proposal, The Physical and Environmental Sciences Department did not have an acting Department Head. However, faculty in the department, including the Undergraduate Curriculum Committee representative, did provide approval as of January 31, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Science
Major: Geosciences
Concentration: Secondary Education

About This Major . . .
The Geosciences secondary licensure degree is structured for graduates to pursue teaching careers at the middle or high school level. The basic curriculum includes all of the major topics within a traditional geology program while also incorporating teacher education courses required for licensure by the state of Colorado. The degree plan includes basic chemistry, physics, and biology. Instruction takes place in a state of the art science complex on campus which houses several instructional laboratories, projects rooms, a computer applications lab, petrology-mineralogy lab, and rock storage facilities. Most classes include a strong field component, allowing students to take advantage of the diverse geological setting of the Grand Junction area. Students have access to department equipment that includes research petrographic microscopes, binocular microscopes, a computer-assisted x-ray diffractometer, scanning electron microscopes, GPS units, short- and long-period seismometers, and a magnetometer. The secondary licensure program provides teacher education candidates with broad content knowledge in science and prepares them as teachers for grades 7 through 12. A minimum of 75 credit hours of Essential Learning and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education secondary licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria. EDUC 115, What It Means to be an Educator, and EDUC 215, Teaching as a Profession, must be taken before applying to the program.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

Geosciences Outcomes:
1. Articulate the fundamental knowledge base and ideas of the major fields of geoscience. (Specialized Knowledge)
2. Collect and interpret geoscience field data. (Applied Learning/Critical Thinking)
3. Collect and interpret geoscience laboratory data. (Applied Learning/Critical Thinking)
4. Use technology (e.g. computer software) for evaluating quantitative geoscience data. (Quantitative Fluency)
5. Write an effective report on a geoscience study. (Communication Fluency)
6. Give an effective oral presentation on a geoscience study. (Communication Fluency)

Teacher Education Outcomes:
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

6. Instruct K-12 students based on self-written learning plans to address individual learning and developmental patterns in the Physical Sciences. (Specialized Knowledge)
7. Design a safe and supportive learning environment for elementary and secondary education students. (Applied Learning)
8. Apply content knowledge while working with learners to access information in real-world settings, assuring learner mastery of the content. (Specialized Knowledge)
9. Integrate assessment, planning, and instructional strategies in coordinated and engaging ways through multiple means of communication. (Critical Thinking/Communication Fluency)
Engage in meaningful and intensive professional learning and self-renewal by regularly examining practice through ongoing study, self-reflection, and collaboration. (Applied Learning)

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html. If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 126 semester hours required for the BS in Geosciences, Secondary Education.
- 2.80 cumulative GPA or higher in all CMU coursework.
- 2.80 cumulative GPA or higher in coursework toward the major content area.
- A “C” or higher is required in all major and foundation courses.
- All EDUC prefix courses must be completed with a grade of "B" or better.
- Students must pass the PRAXIS II exam in the content area prior to beginning the internship. Also, all other coursework toward the degree must be successfully completed prior to the internship.

**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “B” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 113 - College Algebra (4) or higher

  3 credits apply to the Essential Learning requirements and one credit applies to foundation courses.

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- PSYC 233 - Human Growth and Development (3) (must receive a grade of “B” or better)
- Select one Social and Behavioral Sciences course (3)
- GEOG 103 - World Regional Geography (3) recommended

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Science course (3)
- BIOL 105 - Attributes of Living Systems (3)
- BIOL 105L - Attributes of Living Systems Laboratory (1)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (17 semester hours, must earn a grade of “C” or better in each course.)
- MATH 113 - College Algebra (1)
- CHEM 131 - General Chemistry I (4)
- CHEM 131L - General Chemistry I Laboratory (1)
- PHYS 101 - Elementary Astronomy (3)
- PHYS 111 - General Physics (4)
- PHYS 111L - General Physics Laboratory (1)
- MATH 130 - Trigonometry (3)
BS, GEOSCIENCES SECONDARY EDUCATION REQUIREMENTS (40 semester hours, must pass all courses with a grade of “C” or higher)

Required Core Courses (40 semester hours)

- One of the following courses:
  - GEOL 103 - Weather and Climate (3)
  - GEOL 104 - Oceanography (3)
- One of the following (Either GEOL 111/111L or GEOL 113/113L may be taken for credit but not both):
  - GEOL 111 - Principles of Physical Geology (3) and GEOL 111L - Principles of Physical Geology Laboratory (1)
  - GEOL 113 - Field Based Intro to Physical Geology (3) and GEOL 113L - Field Based Intro to Physical Geology Laboratory (1)
- GEOL 111 - Principles of Physical Geology (3)
- GEOL 111L - Principles of Physical Geology Laboratory (1)
- GEOL 112 - Principles of Historical Geology (3)
- GEOL 112L - Principles of Historical Geology Laboratory (1)
- GEOL 202 - Introduction to Field Studies (3)
- GEOL 204 - Computer Applications in Geology (3)
- GEOL 250 - Environmental Geology (3)
- GEOL 301 - Structural Geology (3)
- GEOL 301L - Structural Geology Laboratory (1)
- GEOL 331 - Crystallography and Mineralogy (3)
- GEOL 331L - Crystallography and Mineralogy Laboratory (1)
- GEOL 340 - Igneous and Metamorphic Petrology (3)
- GEOL 340L - Igneous and Metamorphic Petrology Laboratory (1)
- GEOL 402 - Applications of Geomorphology (3)
- GEOL 402L - Applications of Geomorphology Laboratory (1)
- GEOL 444 - Stratigraphy and Sedimentation (3)
- GEOL 444L - Stratigraphy and Sedimentation Laboratory (1)

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours. 3 semester hours)

- ______________________________
- ______________________________
- ______________________________

SECONDARY EDUCATION REQUIREMENTS (29 semester hours)

Program Requirements: ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215 (all with a grade of B or better) and formal acceptance to the Teacher Education Program.

- EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
- EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3) (20 field experience hours)
- EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
- EDUC 442 - Integrating Literacy across the Curriculum: Secondary and K-12 Art (3) (60 field experience hours)
- EDUC 475 - Classroom Management (1)
- EDUC 497 - Content Methodology Practicum (3) (80 field experience hours)
- EDUC 497D - Methods of Teaching Secondary Science (2)

This course is only offered in the fall semester. It may be taken with either the 300-level or 400-level EDUC courses but must be taken before the student teaching semester.

- EDUC 499G - Teaching Internship and Colloquia: Secondary (12) (600 field experience hours)

All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must pass the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits
- GEOL 103 - Weather and Climate (3) or GEOL 104 - Oceanography (3)
- GEOL 111 - Principles of Physical Geology (3) and GEOL 111L - Principles of Physical Geology Laboratory (1), or GEOL 113 - Field-Based Introduction to Physical Geology (3) and Field-Based Introduction to Physical Geology Laboratory (1)
- ENGL 111 - English Composition (3)
- MATH 113 - College Algebra (4)
- KINE 100 - Health and Wellness (1)

Freshman Year, Spring Semester: 16 credits
- GEOL 112 - Principles of Historical Geology (3) and GEOL 112L - Principles of Historical Geology Laboratory (1)
- ENGL 112 - English Composition (3)
- MATH 130 - Trigonometry (3)
- PSYC 233 - Human Growth and Development (3)
- GEOG 103 - World Regional Geography (3)

Sophomore Year, Fall Semester: 17 credits
- GEOL 202 - Introduction to Field Studies (3)
- GEOL 250 - Environmental Geology (3)
- CHEM 131 - General Chemistry I (4) and CHEM 131L - General Chemistry I Laboratory (1)
- PHYS 111 - General Physics (4) and PHYS 111L - General Physics Laboratory (1)
- EDUC 115 - What It Means to be an Educator (1)

Sophomore Year, Spring Semester: 17 credits
- GEOL 204 - Computer Applications in Geology (3)
- BIOL 105 - Attributes of Living Systems (3) and BIOL 105L - Attributes of Living Systems Laboratory (1)
- PHYS 101 - Elementary Astronomy (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - Natural Science (3)
- KINA Activity (1)

Junior Year, Fall Semester: 16 credits
- GEOL 301 - Structural Geology (3) and GEOL 301L - Structural Geology Laboratory (1)
- GEOL 331 - Crystallography and Mineralogy (3) and GEOL 331L - Crystallography and Mineralogy Laboratory (1)
- Essential Learning - History (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- EDUC 215 - Teaching as a Profession (1)

Junior Year, Spring Semester: 17 credits
- GEOL 340 - Igneous and Metamorphic Petrology (3) and GEOL 340L - Igneous and Metamorphic Petrology Laboratory (1)
- GEOL 444 - Stratigraphy and Sedimentation (3) and GEOL 444L - Stratigraphy and Sedimentation Laboratory (1)
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3)
- EDUC 343 - Teaching to Diversity (3)
- General Elective (3)

Senior Year, Fall Semester: 16 credits
- GEOL 402 - Applications of Geomorphology (3) and GEOL 402L - Applications of Geomorphology Laboratory (1)
- Essential Learning - Humanities (3)
- EDUC 442 - Integrating Literacy Across the Curriculum (3)
- EDUC 475 - Classroom Management (1)
- EDUC 497 - Content Methodology Practicum (3)

2019-20 BS, Geosciences, Secondary Education (3474). Posted:
• EDUC 497D - Methods of Teaching Secondary Science (2)

**Senior Year, Spring Semester: 12 credits**

• EDUC 499G - Teaching Internship and Colloquia (12)
Course Additions

ANTH 231

Credit Hours 3

Course Title: Survey of Biological Anthropology

Abbreviated Title: Survey of Biological Anth

Contact hours per week: Lecture 3 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 2250 Student preparation minutes: 4500

Intended semesters for offering this course: Fall ✔ J-Term ☐ Spring ☐ Summer ☐

Intended semester to offer course 1st time: Fall 2020

Number of times course may be taken for credit: 1

Essential Learning Course: Yes ☑ No ☐

Category: Social and Behavioral Sciences

EL SLO: o Produce effective arguments and summaries in written English
o Critically examine and evaluate an argument.
o Demonstrate investigative and analytical thinking skills to solve problems.
The course includes some controversial material such as human evolution, human response to climate change over millennia, and the need for physical and cultural diversity for long-term survival of the species. Two exercises in particular (a learning exercise on GMOs and a term paper discussing a specific cultural or physical change of their choice asks students to summarize the positive and negative aspects, and then produce a well-argued opinion on the subject. The students are also asked to demonstrate investigative and analytical thinking skills in a learning exercise on microevolutionary scenarios where they are given examples of species adaptations and from these, are asked which of the forces of evolution (mutation, genetic drift, gene flow or natural selection) the change is an example. Note: FOAN 180 was already an EL course prior to this change. Doug O'Roark supports this "new" course's EL status, as nothing is being changed besides the prefix/name/number (phone conversation 11/29/18). This has since been approved by the EL committee (1.29.19)

Prerequisites: Yes ☑ No ☐

Prerequisite for other course(s): Yes ☑ No ☐

Co-requisites: Yes ☑ No ☐

ANTH231L

Requirement or listed choice for any program of study: Yes ☑ No ☐

SBS BA, Applied Anthropology and Geology: 3780
SBS Minor, Forensic Anthropology: M715
SBS Minor, Archaeology: M725

Course is a requirement for a new program:
N/A

Overlapping content with present courses offered on campus: Yes ☑ No ☐

Additional faculty FTE required: Yes ☑ No ☐

Additional equipment required: Yes ☑ No ☐

Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:
Course Additions

Exploration of culture through the lens of evolutionary biology. Students will study culture as a changing entity that helps our biological species adapt to multiple physical and social environments. Includes discussion of non-human primates and the application of biological anthropology to forensic science.

Edited and Accepted by J. Varner, 11/28/18

Justification:
This course is a renumbering and naming of a previous course, FOAN180. With the new Applied Anthropology and Geography major, bringing together courses in three disciplines, we have made some numbering conventions that will help to integrate the courses in the major.

For the prefix, both the ARKE and FOAN designations exist due to the creation of the minors during a period when there was no cohesive major. They have no disciplinary meaning, nor are they used at other institutions. The ANTH prefix, on the other hand is a standard prefix that will hold more meaning on transcripts than either the ARKE or FOAN prefixes.

For the number change, as part of the BA in Applied Anthropology and Geography, AAG created a standardized numbering system to make the program more cohesive. The first digit relates to the level of the course, the second relates to the subdiscipline (1 - geography; 2 - archaeology; 3 - biological anthropology; 4 - cultural anthropology). Overtime, all courses will be moved into this new system. This process is beginning with FOAN 180/L, Survey of Physical Anthropology/Laboratory, changing it to ANTH 231/L, Survey of Biological Anthropology/Laboratory. The course is moving to the 200 level because our true beginning course, ANTH 202, Introduction to Anthropology, will be moved next year to the 100 level, befitting its introductory level. In neither case are changes to the course curriculum being made; rather the change in numbers more accurately reflects current course curriculum.

Topical course outline:
Definition of biological anthropology
Genetics: Mendelian, cellular, and population
Overview of primates
Human evolution
Applied biological anthropology

Student Learning Outcomes:
1. Define anthropological approaches to the study of human biology as it interacts with human culture.
2. Define anthropology and physical anthropology and explain their applications toward the solution of human problems.
3. Define parallels and divergence in origin, physiology, social organization, and behavior among primates.
4. Describe the genetic ties that bind humankind together despite physical variation and the variety of biological responses to environments and cultural adaptation.
5. Employ a scientific perspective in the study of human evolution and biology.
6. Explain human ancestral heritage and origins.
7. Explain the genetic processes of evolution.
8. Place the human species within a temporal and taxonomic framework.

Discussions with affected departments:
The three disciplines being brought together are Forensic Anthropology, Archaeology and Geography. The three faculty representing these disciplines were part of the design of the course numbering conventions. They fully agree with the new system.

Proposed by: Melissa Connor

Expected Implementation: Fall 2019
Course Additions

ANTH 231L

Credit Hours 1

Course Title: Survey of Biological Anthropology Laboratory

Abbreviated Title: Survey of Biological Anth Lab

Contact hours per week: Lecture Lab 2 Field Studio Other

Type of Instructional Activity: Laboratory: Academic/Clinical

Academic engagement minutes: 1500

Student preparation minutes: 750

Intended semesters for offering this course: Fall ☑ J-Term ☐ Spring ☐ Summer ☐

Intended semester to offer course 1st time: Fall 2020

Number of times course may be taken for credit: 1

Essential Learning Course: Yes ☑ No ☐

Category: Social and Behavioral Sciences

EL SLO: o Critically examine and evaluate an argument
o Demonstrate investigative and analytical thinking skills to solve problems
The lab exercises require students to compare and contrast material (e.g., Homo erectus, H. neanderthalensis, and H. sapiens) to look at difference in the physical attributes and then propose hypotheses (e.g. diet) to explain why the differences exist. They are also presented with existing hypotheses in the field and asked to critique how what they see in the anatomical structure relates to those hypotheses.

Note: FOAN 180 was already an EL course prior to this change.

Doug O’Roark supports this new course’s EL status, as nothing is being changed besides the name/number (phone conversation 11/29/18)

Prerequisites: Yes ☑ No ☐

Prerequisite for other course(s): Yes ☑ No ☐

Co-requisites: Yes ☑ No ☐

ANTH231

Requirement or listed choice for any program of study: Yes ☑ No ☐

SBS BA, Applied Anthropology and Geology: 3780
SBS Minor, Forensic Anthropology: M715
SBS Minor, Archaeology: M725

Course is a requirement for a new program:
N/A

Overlap with present courses offered on campus: Yes ☑ No ☐

Additional faculty FTE required: Yes ☑ No ☐

Additional equipment required: Yes ☑ No ☐

Additional lab facilities required: Yes ☑ No ☐

Course description for catalog:
Lab component for ANTH 231.

Justification:
This course is a renumbering and naming of a previous course, FOAN180. With the new Applied Anthropology and Geography major, bringing together courses in three disciplines, we have made some numbering conventions that will help to integrate the courses in the major.

For the prefix, both the ARKE and FOAN designations exist due to the creation of the minors during a period when there was no cohesive major. They have no disciplinary meaning, nor are they used at other
Course Additions

institutions. The ANTH prefix, on the other hand is a standard prefix that will hold more meaning on transcripts than either the ARKE or FOAN prefixes.

For the number change, as part of the BA in Applied Anthropology and Geography, AAG created a standardized numbering system to make the program more cohesive. The first digit relates to the level of the course, the second relates to the subdiscipline (1 - geography; 2 - archaeology; 3-biological anthropology; 4 - cultural anthropology). Overtime, all courses will be moved into this new system. This process is beginning with FOAN 180/L, Survey of Physical Anthropology/Laboratory, changing it to ANTH 231/L, Survey of Biological Anthropology/Laboratory. The course is moving to the 200 level because our true beginning course, ANTH 202, Introduction to Anthropology, will be moved next year to the 100 level, befitting its introductory level. In neither case are changes to the course curriculum being made; rather the change in numbers more accurately reflects current course curriculum.

Topical course outline:

- Scientific method
- Genetics: Mendelian, cellular, and population
- Overview of primates
- Human evolution
- Applied biological anthropology

Student Learning Outcomes:

1. Define anthropological approaches to the study of human biology as it interacts with human culture.
2. Define anthropology and physical anthropology and explain their applications toward the solution of human problems.
3. Define parallels and divergence in origin, physiology, social organization, and behavior among primates.
4. Describe the genetic ties that bind humankind together despite physical variation and the variety of biological responses to environments and cultural adaptation.
5. Employ a scientific perspective in the study of human evolution and biology.
6. Explain human ancestral heritage and origins.
7. Explain the genetic processes of evolution.
8. Place the human species within a temporal and taxonomic framework.

Discussions with affected departments:

The three disciplines being brought together are Forensic Anthropology, Archaeology and Geography. The three faculty representing these disciplines were part of the design of the course numbering conventions. They fully agree with the new system.

Proposed by: Melissa Connor

Expected Implementation: Fall 2019
ANTH 341

**Course Title:** Indigenous Cultures of North America

**Abbreviated Title:** Indigenous Cultures/N. America

**Contact hours per week:** Lecture: 3, Lab: 0, Field: 0, Studio: 0, Other: 0

**Type of Instructional Activity:** Lecture

**Academic engagement minutes:** 2250, **Student preparation minutes:** 4500

**Intended semesters for offering this course:** Fall ☑ J-Term ☐ Spring ☐ Summer ☐

**Intended semester to offer course 1st time:** Fall 2019

**Number of times course may be taken for credit:** 1

**Essential Learning Course:** Yes ☑ No ☐

**Prerequisites:** Yes ☑ No ☐

**Prerequisite for other course(s):** Yes ☑ No ☐

**Co-requisites:** Yes ☑ No ☐

**Requirement or listed choice for any program of study:** Yes ☑ No ☐

- SBS Prof Cert, Cultural Resource Management: 1710
- SBS BA, Applied Anthropology and Geology: 3780

**Overlapping content with present courses offered on campus:** Yes ☑ No ☐

There will inevitably be some overlap between this course and HIST 315, American Indian History, but the approaches are different enough where the overlap will be minimal. Also, I spoke with O’Roark and Schulte on the HIST faculty (12/10/18), and both are in support of this course addition.

**Additional faculty FTE required:** Yes ☑ No ☐

**Additional equipment required:** Yes ☑ No ☐

**Additional lab facilities required:** Yes ☑ No ☐

**Course description for catalog:**

Examination of the diversity of past and present Native American peoples and cultures through ethnography. Presents the outcomes of culture change due to colonialism and modern efforts towards cultural revitalization.

Description edited and passed by Johanna Varner, 11/28/18

**Justification:**

This course is strongly recommended for anyone who proposes to work in North American archaeology and/or anthropology. Consultation with Native peoples is a requirement when designing research, so students should have at least some background into Native history and worldviews. Furthermore, this course strengthens our new BA program by adding a course in cultural anthropology/ethnography.

**Topical course outline:**

- Course has three sections:
  - Anthropological Overviews of Select Native Peoples;
  - In-depth study of a single ethnographic work;
  - Cultural Revitalization in the 21st century

**Student Learning Outcomes:**

1. Compare and contrast the unity and diversity of Native American cultures across North America
Course Additions

2. Compare, articulate and critique the major themes that occur in the ethnographic literature of American Indians
3. Appraise the utility and veracity of the American Indian ethnographic data collected
4. Compare and contrast traditional ways of life with their modern counterparts, describing how cultures have changed since the colonial era
5. Investigate the issues confronting American Indian communities today and evaluate the impacts of these issues
6. Identify ethical considerations needed when working with informants/research partners in an anthropological setting, articulating why such issues are of importance when working with American Indian peoples to include support of land claims and sovereignty

SLO's discussed with and edited by Morgan Bridge, December 20, 2018

Discussions with affected departments:
NA

Proposed by:  John Seebach  Expected Implementation:  Fall 2019
The lecturer who taught this course passed away several years ago. Though attempted, we have not been able to find another local archaeologist with the expertise and qualifications to teach the course. There is no intention of reactivating this course in the foreseeable future. The current number of elective offerings leave students with plenty of options to complete their degrees without the need to have this one course.
Course Deletions

FOAN 180  
Credit Hours  3

Course Title: Survey of Physical Anthropology

Essential Learning Course: Yes ☑ No ☐

Category: Social and Behavioral Sciences

Requirement or listed choice for any program of study: Yes ☑ No ☐

SBS  BA,  Applied Anthropology and Geology: 3780
SBS  Minor,  Forensic Anthropology: M715
SBS  Minor,  Archaeology: M725

Prerequisite for other course(s): Yes ☑ No ☐

FOAN 350

Co-requisite for other course(s): Yes ☑ No ☐

FOAN180L

Justification:

With the new major in Applied Anthropology and Geography, this course is more appropriate as an Anthropology course. We have also created course numbering conventions for the new major, under which this course will be renumbered as ANTH230.

Proposed by: Melissa Connor  
Expected Implementation: Fall 2019
Course Deletions

FOAN 180L  
Credit Hours  1

Course Title: Survey of Physical Anthropology Laboratory

Essential Learning Course: Yes ☑ No ☐

Category: Social and Behavioral Sciences

Requirement or listed choice for any program of study: Yes ☑ No ☐

SBS BA, Applied Anthropology and Geology: 3780
SBS Minor, Forensic Anthropology: M715
SBS Minor, Archaeology: M725

Prerequisite for other course(s): Yes ☑ No ☐

Co-requisite for other course(s): Yes ☑ No ☐

Justification:

With the new major in Applied Anthropology and Geography, this course is more appropriate as an Anthropology course. We have also created course numbering conventions for the new major, under which this course will be renumbered as ANTH230L.

The course number/title change, and its consequent course deletion, has been discussed and approved by the EL subcommittee. Phone conversation, Doug O’Roark, January 2019.

Proposed by: Melissa Connor  Expected Implementation: Fall 2019

Course Modifications

FOAN 350

Intended semester to offer modified course for the 1st time: Spring 2020

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<tbody>
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<tr>
<td>Course No.: 350</td>
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<td>Credit Hours: 3</td>
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<td>Course Title: Forensic Anthropology</td>
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<td>Times for Credit: 1</td>
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<tr>
<td>Prerequisites: Current: FOAN 232 or FOAN 180</td>
<td>Proposed: FOAN 232 or ANTH 231</td>
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<td>Requirement or listed choice for any program of study: Yes</td>
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<tr>
<td>Change affects program sheet or grad requirements: Yes</td>
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</tr>
</tbody>
</table>

SBS Minor, Forensic Anthropology: M715
SBS BA, Applied Anthropology and Geology: 3780

Justification:
The pre-requisite is being changed to reflect the number/title change from FOAN 180, Survey of Physical Anthropology, to ANTH 231, Survey of Biological Anthropology. The prefix/number/title change is part of the new BA program in Applied Anthropology, making all course numbers internally consistent. The title change reflects current practice in American anthropology, favoring "biological" over "physical."

These changes were discussed among the forensic anthropology faculty, and all were in agreement.

Proposed by: John Seebach

Expected Implementation: Fall 2019
Course Modifications

PSYC 430

Intended semester to offer modified course for the 1st time: Fall 2019

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<td>SBS BA, Psychology:</td>
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<td>SBS BA, Psychology-Counseling Psychology:</td>
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<td>SBS Minor, Forensic Investigation - Psychology:</td>
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<td>PSYC 430 is an upper division psychology class with content that relies heavily on the research methods knowledge and skills provided in PSYC 216/216L, Research Methods in Psychology. Students that have not completed Research Methods lack the preparation to do well in PSYC 430, Biopsychology.</td>
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<td>These changes were discussed among the psychology faculty, and all were in agreement.</td>
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Proposed by: Jeremy Tost

Expected Implementation: Fall 2019
Program Modification

Applied Anthropology and Geology: 3780

Degree Type: BA

Revision to program sheet: Yes ☑️ No ☐

Description of modification:

1. We are changing our course numbering system as part of the new Applied Anth program. The new call number for FOAN 180/L, Survey of Physical Anthropology and Survey of Physical Anthropology Laboratory, and adding ANTH 231/L, Survey of Biological Anthropology and Survey of Biological Anthropology Laboratory. The changed course will still be listed in the Major Core.

2. We are adding ANTH 341, Indigenous Cultures of North America, to the Applied Anthropology and Geography Electives

Justification:

1. We are changing our course numbering system as part of the new Applied Anth program. The new call number for FOAN 180/L, Survey of Physical Anthropology and Survey of Physical Anthropology, reflects this change. The course content remains exactly the same.

2. ANTH 341, Indigenous Cultures of North America, is being added to our curriculum as part of the growth of the new BA in Applied Anth and Geography

Revision to SLOs: Yes ☐ No ☑️

Other changes: Yes ☑️ No ☐

The addition of ANTH 341, Indigenous Cultures of North America, is part of the burgeoning BA program in Applied Anthropology and Geography. This major provides students with a program that balances the needs for applied skills in the workforce and the academic knowledge to go on to graduate study. With regard to ANTH 341, practicing anthropologists and archaeologists in North America should have at least a basic knowledge of the indigenous cultures of this continent, considering the need for tribal consultation on any cultural resource management (applied) or research (academic) project. Consultation requires a sensitivity with regard to native life, belief systems and history, and all are provided by this course. This course also provides students with an introduction to diverse worldviews, and thus conforms to a distinct part of CMU's vision and values.

The course number, prefix and title change from FOAN 180/L, Survey of Physical Anthropology/Laboratory, to ANTH 231/L, Survey of Biological Anthropology/Laboratory, is a change that is in line with current practice in anthropology. "Physical Anthropology" has lost favor to "Biological Anthropology" with the addition of anthropological genetics, epigenetics and other more biologically-based studies to the discipline. Such a change does not substantially alter the course or program characteristics in any way.

Discussions with affected departments:

NA

Proposed by: John Seebach

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Major...

The digital humanities and social sciences, an interdisciplinary field that combines technology skills with social science knowledge, is a growing, innovative collaboration of disciplines making its impact nation-wide. Upon graduation, all students will have knowledge of cartography and GIS, as well as physical anthropology and archaeology. GIS is an applied skill that will give the students in the anthropological sub-disciplines a niche to set them apart from other anthropology undergraduates. The anthropological disciplines provide students, who focus on GIS, a subject matter with which to hone their GIS skills.

BA-seeking students in this program will learn to think critically and ask theoretically-grounded questions about human lives in the immediate area, the surrounding region, and ultimately, across the western USA, in a program that seamlessly blends the acquisition of academic and professional skills. Furthermore, practical training in archaeological, geographical and forensic anthropological field research allows students to take full advantage of the applied employment opportunities available across the western slope and Colorado Plateau as part of energy extraction, law enforcement and/or civil engineering (for example).

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative reasoning, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Demonstrate effective communication both orally and in writing by being precise, including factual, well-cited details, organizing their facts appropriately, and using non-judgmental language through professional documentation and/or oral presentations (communication fluency).

2. Apply basic research methodology sufficient to evaluate research in their field. This will include knowing the difference between qualitative and quantitative methods, understanding descriptive statistics, and basic analytical statistics (quantitative fluency).

3. Demonstrate the tools to be life-long learners, at a minimum this will include being able to evaluate information presented from other students oral presentations, to material found on the internet, and scholarly journal articles (critical thinking).

4. Demonstrate a set of tools appropriate to their sub-discipline (specialized knowledge):
   i. Archaeology students will have a basic set of field archaeological skills
   ii. Forensic Anthropology students will be able to macerate remains and conduct a basic osteological analysis.
   All students will be able to create maps in a geographical information system program and do basic spatial analysis.

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit...
on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

Institutional degree requirements listed above are sufficient for this program.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (3 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)
- KINA 112 – Hiking (1), or KINA 120 – Backpacking (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (6 semester hours)
Two consecutive classes in the same foreign language. FLAS 114 & FLAS 115 will not fulfill this requirement.
- ________________________________
- ________________________________
BA, APPLIED ANTHROPOLOGY GEOGRAPHY REQUIREMENTS (58 semester hours)

Major Core (34 semester hours)
- ANTH 202 - Introduction to Anthropology (3)
- ARKE 205 - Principles of Archaeology (3)
- ARKE 225 - North American Archaeology (3)
- ARKE 410 - Field Methods in Archaeology (3)
- ARKE 410L - Field Methods in Archaeology Laboratory (2)
- FOAN ANTH 1802310 - Survey of Biological/Physical Anthropology (3)
- FOAN ANTH 1802310L - Survey of Physical Biological Anthropology Laboratory (1)
- GEOG 102 - Human Geography (3)
- GEOG 131 - Introduction to Cartography (3)
- GEOG 341 - GIS for Social Scientists (2)
- GEOG 341L - GIS for Social Scientists Laboratory (1)
- GIST 332 - Introduction to Geographic Information Systems (2)
- GIST 332L - Introduction to Geographic Information Systems Laboratory (1)
- STAT 215 - Statistics for Social and Behavioral Sciences (4)

Applied Anthropology and Geography Electives (18 semester hours chosen from the list below)
- ANTH 341 – Indigenous Cultures of North America*
- ARKE 300 - Human Evolution (3)
- ARKE 301 - The Emergence of Human Culture (3) [Leave this on program sheet]
- ARKE 302 - From Domestication to States (3) [Leave this on program sheet]
- ARKE 320 - Colorado Archaeology (3)
- ARKE 350 - Southwest Archaeology (3)
- ARKE 352 - Paleoindian Archaeology (3)
- ARKE 402 - Cultural Resource Management (3)
- ARKE 466 - Field Research in Archaeology (6)*
- ARKE 467 - Archaeology Lab Methods (3)
- ARKE 467L - Archaeology Laboratory (1)**
- ARKE 499 - Internship (3)
- FOAN 232 - Survey of Forensic Science (2)
- FOAN 232L - Survey of Forensic Science Laboratory (1)
- FOAN 280 - Crime Scene Processing (2)
- FOAN 280L - Crime Scene Processing Laboratory (3)
- FOAN 350 - Forensic Anthropology (3)
- FOAN 480 - Professional Issues in Forensic Science (3)
- FOAN 499 - Internship (1-6)
- GEOG 103 - World Regional Geography (3)
- GEOG 399 - Internship (1-6)
- GEOG 499 - Internship (1-6)
- ___________________________
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- ___________________________
- ___________________________

* ARKE 466 requires students to be in the field or lab for a minimum of 6 hours per day for 7 weeks.
** Students taking ARKE 466 are required to take ARKE 467 and ARKE 467L during the subsequent fall semester.
**Restricted Electives** (6 semester hours chosen from the list below)

- BIOL 105 - Attributes of Living Systems (3)
- BIOL 105L - Attributes of Living Systems Laboratory (1)
- BIOL 209 - Human Anatomy and Physiology (3)
- BIOL 209L - Human Anatomy and Physiology Laboratory (1)
- BIOL 210 - Human Anatomy and Physiology II (3)
- BIOL 210L - Human Anatomy and Physiology II Laboratory (1)
- BIOL 241 - Pathophysiology (4)
- BIOL 403 - Evolution (3)
- BIOL 410 - Human Osteology (3)
- BIOL 410L - Human Osteology Laboratory (1)
- GEOL 100 - Survey of Earth Science (3)
- GEOL 402 - Applications of Geomorphology (3)
- GEOL 402L - Applications of Geomorphology Laboratory (1)
- GIST 321 - Introduction to Remote Sensing (2)
- GIST 321L - Introduction to Remote Sensing Laboratory (1)
- GIST 375 - Global Positioning Systems for GIS (2)
- GIST 375L - Global Positioning Systems for GIS Laboratory (1)
- HIST 409 - Material Culture Studies (3)
- HIST 435 - Classical Archaeology (3)
- ________________________________
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**GENERAL ELECTIVES** (All college level courses appearing on your final transcript not listed above that will bring your total semester hours to 120 hours. Could be up to 18 semester hours)

- ________________________________
- ________________________________
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- ________________________________
**SUGGESTED COURSE SEQUENCING**

**Freshman Year, Fall Semester: 16 credits**
- ANTH 202 - Intro to Anthropology (3) or GEOG 102 - Human Geography (3)
- ENGL 111 - English Composition (3)
- Essential Learning - Social and Behavioral Sciences (3)
- Essential Learning - Natural Science (3)
- FOAN 180 - Crime Scene Processing (3)
- FOAN 180L - Crime Scene Processing Laboratory (1)
- ANTH 2310 - Survey of Biological Anthropology
- ANTH 2310L - Survey of Biological Anthropology Laboratory

**Freshman Year, Spring Semester: 15 credits**
- ENGL 112 - English Composition (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - History (3)
- GEOG 131 - Introduction to Cartography (3)
- MATH 110 - College Mathematics (3) or higher

**Sophomore Year, Fall Semester: 16 credits**
- ANTH 202 - Intro to Anthropology (3) or GEOG 102 - Human Geography (3)
- Essential Learning - Natural Science with Lab (4)
- Essential Learning - Humanities (3)
- Essential Learning - Social and Behavioral Science (3)
- Foreign Language (3)

**Sophomore Year, Spring Semester: 15 credits**
- ARKE 205 - Principles of Archaeology (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- Foreign Language (3)
- KINE 100 - Health and Wellness (1)
- STAT 215 - Statistics for Social and Behavioral Sciences (4)

**Junior Year, Fall Semester: 15 credits**
- Applied Anthropology and Geography Elective (3)
- ARKE 225 - Introduction to North American Archaeology (3)
- General Elective (3)
- GIST 332 - Introduction to Geographic Information Systems (2)
- GIST 332L - Introduction to Geographic Information System Laboratory (1)
- Restricted Elective (3)

**Junior Year, Spring Semester: 15 credits**
- Applied Anthropology and Geography Elective (3)
- ARKE 410 - Field Methods in Archaeology (3)
- ARKE 410L - Field Methods in Archaeology Laboratory (2)
- General Elective (3)
- GEOG 341 - GIS for Social Scientists (2)
- GEOG 341L - GIS for Social Scientists Laboratory (1)
- KINA 112 - Hiking (1) or KINA 120 - Backpacking (1)

**Senior Year, Fall Semester: 15 credits**
- Applied Anthropology and Geography Electives (6)
- General Electives (6)
- Restrict Elective (3)

**Senior Year, Spring Semester: 13 credits**
- Applied Anthropology and Geography Electives (6)
- General Elective (3)

2019-20 BS, Applied Anthropology and Geography (3780). Posted:
- General Elective (3)
- KINA Activity Course (1)
Program Modification

Cultural Resource Management: 1710

Degree Type:  Prof Cert

Revision to program sheet:  Yes ☒  No ☐

Description of modification:
1. ARKE 325, Geoarchaeology, is being removed from the program sheet.
2. ANTH 341, Indigenous Cultures of North America, is being listed as a choice for Certificate Program.

Justification:
1. We can find no one with the qualifications to teach this course; it has not been taught since 2010, and we have no plans to reinstate it.
2. ANTH 341, Indigenous Cultures of North America, is being added to the curriculum. This course will be strongly recommended to those considering a career in Cultural Resource Management as tribal consultation will be a component of their future careers.

Revision to SLOs:  Yes ☐  No ☒

Other changes:  Yes ☒  No ☐

The addition of ANTH 341, Indigenous Cultures of North America, is part of the burgeoning BA program in Applied Anthropology and Geography. This major provides students with a program that balances the needs for applied skills in the workforce and the academic knowledge to go on to graduate study. Specifically, practicing anthropologists and archaeologists in North America should have at least a basic knowledge of the indigenous cultures of this continent, considering the need for tribal consultation on any cultural resource management (applied) or research (academic) project. Consultation requires a sensitivity with regard to native life, belief systems and history, and all are provided by this course. This course also provides students with an introduction to diverse worldviews, one of CMU’s distinct values.

Discussions with affected departments:

NA

Proposed by:  John Seebach

Director of Teacher Education Signature:  

Expected Implementation:  Fall 2019
About This Major . . .
The Certificate in Cultural Resource Management is designed to give students the basic skills necessary for entry-level (field technician) positions in applied archaeology. These will include, but are not limited to, basic archaeological field methods, basic archaeological lab methods, the use of Geographic Information Systems and Public Interpretation. Beyond these skills, however, the certificate program strives to produce creative, engaged and informed archaeologists who can articulate Cultural Resource Management’s role in inquiry-based archaeology and its larger anthropological goals.

Upon completion of the program, students will be able to:
1. Combine academic archaeological theory with applied skills in the field and lab. (Applied Learning)
2. Communicate the kind and scope of appropriate archaeological studies with regard to federal and state law. (Specialized Knowledge)
3. Apply general knowledge of archaeological methods to specific situations encountered in the field. (Critical Thinking)
4. Utilize all modern technologies currently being used in archaeological research, including GIS and electronic mapping. (Specialized Knowledge)
5. Communicate findings and their importance to diverse stakeholders (landowners, corporate interests, scientific colleagues, the general public), in written and oral media. (Communication Fluency)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a certificate. Some courses are critical to complete in specific semesters while others may be moved around. Meeting with an academic advisor is essential in planning courses and discussing the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended certificate.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a certificate and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their certificate requirements (for one semester certificates complete in the first week of class):
• Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
• Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
• Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
• Register for all needed courses and complete all requirements for each degree sought.
Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If your petition for graduation is denied, it will be your responsibility to apply for graduation in a subsequent semester. Your “Intent to Graduate” does not automatically move to a later graduation date.
INSTITUTIONAL CERTIFICATE REQUIREMENTS
The following institutional requirements apply to all CMU professional certificates. Specific programs may have different requirements that must be met in addition to institutional requirements.

- Consists of 5-59 semester hours.
- Primarily 300-400 level courses.
- At least fifty percent of the credit hours must be taken at CMU.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Certificate Requirements.
- The Catalog Year determines which program sheet and certificate requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC CERTIFICATE REQUIREMENTS

- 42 semester hours for the Professional Certificate in Cultural Resource Management.
- 2.00 cumulative GPA or higher in all CMU coursework and a "C" or better must be achieved in coursework toward major content area.

2019-20 Professional Certificate, Cultural Resource Management (1710). Posted:
PROFESSIONAL CERTIFICATE: CULTURAL RESOURCE MANAGEMENT REQUIREMENTS (42 semester hours)

Archaeology Courses (30 semester hours)
- ARKE 205 - Principles of Archaeology (3)
- ARKE 225 - Introduction to North American Archaeology (3)
- ARKE 402 - Cultural Resource Management (3)
- ARKE 410 - Field Methods in Archaeology (3)
- ARKE 410L - Field Methods in Archaeology Laboratory (2)
- ARKE 466 - Field Research in Archaeology (6)
- ARKE 467 - Archaeology Lab Methods (3)
- ARKE 467L - Archaeology Laboratory (1)

Choose 6 semester hours from the list below, at least 3 of which have to be from the ARKE selections numbered 300 or higher.

ANTH 202 - Introduction to Anthropology
ANTH 341 – Indigenous Cultures of North America
ARKE 300 - Human Evolution (3)
ARKE 301 - The Emergence of Human Culture (3) [Leave on the program sheet]
ARKE 302 - From Domestication to States (3) [Leave on the program sheet]
ARKE 320 - Colorado Archaeology (3)
ARKE 325 - Geoarchaeology (3)
ARKE 350 - Southwest Archaeology (3)
ARKE 352 - Paleoindian Archaeology (3)
HIST 435 - Classical Archaeology (3)

Cultural Resource Management Courses (12 semester hours)
- GEOG 131 - Introduction to Cartography (3)
- GIST 332 - Introduction to GIS (2)
- GIST 332L - Introduction to GIS Laboratory (1)
- GIST 375 - Global Positioning Systems for GIS (2)
- GIST 375L - Global Positioning Systems for GIS Laboratory (1)
- One of the following courses:
  - ARKE 499 - Internship (3)
  - GEOG 499 - Internship (3)

* Prerequisites: ARKE 205 and ARKE 325, or consent of instructor.
* Prerequisite: ARKE 410/410L
* Prerequisite: ANTH 202
* Prerequisite: GEOL 111/111L
* Prerequisite: HIST 101
* Prerequisites: GIST 332 & GIST 332L
# Suggested Course Sequencing

<table>
<thead>
<tr>
<th>Semester</th>
<th>Credits</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year, Fall Semester</strong></td>
<td>6 credits</td>
<td>GEOG 131 - Introduction to Cartography (3)</td>
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<tr>
<td></td>
<td></td>
<td>ARKE 205 - Principles of Archaeology (3)</td>
</tr>
<tr>
<td><strong>First Year, Spring Semester</strong></td>
<td>9 credits</td>
<td>ARKE 225 - North American Archaeology (3)</td>
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<td></td>
<td>GIST 332 - Introduction to GIS (2)</td>
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<td></td>
<td></td>
<td>GIST 332L - Introduction to GIS Laboratory (1)</td>
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<tr>
<td></td>
<td></td>
<td>Select 3 semester hours Archeology Courses (3)</td>
</tr>
<tr>
<td><strong>Second Year, Fall Semester</strong></td>
<td>6 credits</td>
<td>GIST 375 - Global Positioning Systems for GIS (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GIST 375L - Global Positioning Systems for GIS Laboratory (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select 3 semester hours Archeology Courses (3)</td>
</tr>
<tr>
<td><strong>Second Year, Spring Semester</strong></td>
<td>8 credits</td>
<td>ARKE 402 - Cultural Resource Management (3)</td>
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<td>ARKE 410 - Field Methods in Archaeology (3)</td>
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<td></td>
<td>ARKE 410L - Field Methods in Archeology Laboratory (2)</td>
</tr>
<tr>
<td><strong>Second Year, Summer Semester</strong></td>
<td>6 credits</td>
<td>ARKE 466 – Archaeological Fieldwork (6)</td>
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<tr>
<td><strong>Third Year, Fall Semester</strong></td>
<td>7 credits</td>
<td>ARKE 467 - Archaeological Lab Methods (3)</td>
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<td>ARKE 467L - Archaeological Laboratory (1)</td>
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<tr>
<td></td>
<td></td>
<td>ARKE 499 or GEOG 499 - Internship (3)</td>
</tr>
</tbody>
</table>
Program Modification

Archaeology: M725

Degree Type: Minor

Revision to program sheet: Yes ☑ No ☐

Description of modification:

1. ARKE 466, Field Research in Archaeology, is being removed as a requirement to obtain the minor, though it can still be taken by choice, reducing the number of hours required for the minor (now 20 from 26).
2. FOAN 180/L, Survey of Physical Anthropology, is being replaced by ANTH 231/L, Survey of Biological Anthropology.
3. ARKE 325, Geoarcheology, is being removed as an option from the program sheet.

Justification:

1. Removing this requirement brings the Archaeology minor down to 20 hours, in line with other minors on campus and within the credit hour policy stating minors need to be between 15-24 hours. A further justification is that a full field season is not necessary for minoring students, but they can have the option if desired.
2. The course prefix, number and title are being changed. This is being done in accordance with a new numbering system being adopted as part of the new BA program in Applied Anthropology and Geography.
3. This course is being deleted as it has not been taught since 2010. We have no plans to teach it into the foreseeable future. We do not foresee reinstating the course.

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☑ No ☐

With ARKE 466, Field Research in Archaeology, the minor is not compliant with the credit hour policy stating all minors need to be within 15-24 hours. The removal of this requirement brings the minor program into compliance.

Discussions with affected departments:

NA

Proposed by: John Seebach

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Minor

The Archaeology minor introduces students to the knowledge and skills necessary to carry out archaeological investigations and to treat what is recovered through such investigations appropriately. Courses taken as part of the minor will provide students with background knowledge of North American prehistory and in-depth studies of regional sequences within that prehistory. The Minor especially complements such degree programs as History and Geology. Students with the background in Archaeology and Cultural Resource Management that the Minor supplies will be well prepared to enter the burgeoning local market in these areas.

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a minor. Meeting with an academic advisor is essential in planning courses and developing a suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended minor.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a minor. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head for the minor. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process

A minor cannot be awarded by itself. It must be combined with a baccalaureate degree outside the major field of study. Students should follow the graduation process outlined for the baccalaureate degree and list their majors and minors on the “Intent to Graduate” form.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL MINOR REQUIREMENTS
The following institutional requirements apply to all CMU minors. Specific programs may have different requirements that must be met in addition to institutional requirements.
- A minor consists of 15-24 semester hours. There may be prerequisites required for the minor which will increase the total number of credit hours for a student who has not already taken those prerequisites.
- Courses taken to satisfy Essential Learning, major requirements, or electives can be counted toward the minor if applicable.
- At least 33 percent of the credit hours required for the minor must be in courses numbered 300 or above.
- At least 25 percent of the classes must be taken at CMU.
- 2.00 cumulative GPA or higher for the courses used for the minor.
- A minor is not a degree by itself and must be earned at the same time as a baccalaureate degree.
- A student may earn up to five minors with any baccalaureate degree at CMU.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements sheet you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC MINOR REQUIREMENTS
- 206 semester hours for the Minor in Archaeology.

REQUIRED COURSES FOR THE ARCHAEOLOGY MINOR (206 semester hours)
- ANTH 202 - Introduction to Anthropology (3)
- ARKE 205 - Principles of Archaeology (3)
- ARKE 225 - Introduction to North American Archaeology (3)
- ARKE 410 - Field Methods in Archaeology (3)
- ARKE 410L - Field Methods in Archaeology Laboratory (2)
- ARKE 466 - Field Research in Archaeology (6)

Choose 6 semester hours from the list below, at least 3 hours of which have to be from the ARKE selections numbered 300 or higher:
- ARKE 300 - Human Evolution (3)
- ARKE 301 - The Emergence of Human Culture (3) [Leave on program sheet]
- ARKE 302 - From Domestication to States (3) [Leave on program sheet]
- ARKE 320 - Colorado Archaeology (3)
- ARKE 325 - Geoaarchaeology (3)
- ARKE 350 - Southwest Archaeology (3)
- ARKE 352 - Paleoindian Archaeology (3)
- ARKE 402 - Cultural Resource Management (3)
- ARKE 466 - Field Research in Archaeology (6)
- ARKE 467/L - Archaeology Laboratory (1)
- SOAN-ANTH 180-2310 - Survey of Physical Anthropology (3)
- SOAN-ANTH 180L-2310L - Survey of Physical Anthropology Laboratory (1)
- GIS 332 - Introduction to Geographic Information Systems (2)
- HIST 435 - Classical Archaeology (3)

Additional courses:
- ARKE 325 - Geoaarchaeology
- ARKE 350 - Southwest Archaeology
- ARKE 352 - Paleoindian Archaeology
- ARKE 402 - Cultural Resource Management
- ARKE 466 - Field Research in Archaeology
- ARKE 467/L - Archaeology Laboratory

4 Prerequisites: ARKE 205 and ARKE 225, or consent of instructor.
5 Prerequisite: ARKE 410/410L
6 Prerequisite: GEOL 111/1111 (4 credits). It is advised that students take the course in fulfillment of the Essential Learning Laboratory Science requirement.
7 Prerequisite: either GEOG 131 (3 credits) or GEOL 305 (1 credit).
8 Prerequisite: HIST 101.
9 Prerequisite: ARKE 466

Program Modification

Forensic Anthropology: M715

Degree Type: Minor

Revision to program sheet: Yes ☑ No □

Description of modification:
Remove FOAN180, Survey of Physical Anthropology, and FOAN180L, Survey of Physical Anthropology Laboratory, and add ANTH231, Survey of Biological Anthropology, and ANTH231L, Survey of Biological Anthropology Laboratory.

Justification:
With the new major we have made some conventions for numbering and FOAN180, Survey of Physical Anthropology, and FOAN180L, Survey of Physical Anthropology Laboratory, fits better into the new system as ANTH231, Survey of Biological Anthropology, and ANTH231L, Survey of Biological Anthropology Laboratory.

Revision to SLOs: Yes □ No ☑

Other changes: Yes □ No ☑

Discussions with affected departments:
NA

Proposed by: Melissa Connor

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Minor.
The Forensic Anthropology minor introduces students to the knowledge and skills necessary to employ anthropological techniques in a forensic context. Students become familiar with both field and laboratory techniques used in forensic anthropology. Students in the minor use the Forensic Investigation Research Station, a facility built to study the decomposition of the human body. The Minor especially complements such degree programs as Criminal Justice and Biology. Students with the background in Forensic Anthropology will be better prepared for jobs in areas related to death investigation.

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a minor. Meeting with an academic advisor is essential in planning courses and developing a suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended minor.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a minor. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head for the minor. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
A minor cannot be awarded by itself. It must be combined with a baccalaureate degree outside the major field of study. Students should follow the graduation process outlined for the baccalaureate degree and list their majors and minors on the “Intent to Graduate” form.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL MINOR REQUIREMENTS

The following institutional requirements apply to all CMU minors. Specific programs may have different requirements that must be met in addition to institutional requirements.

- A minor consists of 15-24 semester hours. There may be prerequisites required for the minor which will increase the total number of credit hours for a student who has not already taken those prerequisites.
- Courses taken to satisfy Essential Learning, major requirements, or electives can be counted toward the minor if applicable.
- At least 33 percent of the credit hours required for the minor must be in courses numbered 300 or above.
- At least 25 percent of the classes must be taken at CMU.
- 2.00 cumulative GPA or higher for the courses used for the minor.
- A minor is not a degree by itself and must be earned at the same time as a baccalaureate degree.
- A minor must be outside the major field of study.
- A student may earn up to five minors with any baccalaureate degree at CMU.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements sheet you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC MINOR REQUIREMENTS

- 22 semester hours for the Minor in Forensic Anthropology.

REQUIRED COURSES FOR THE FORENSIC ANTHROPOLOGY MINOR (22 semester hours)

☐ One of the following options:
  - FOAN-ANTH180-2310 - Survey of Physical-Biological Anthropology (3) and FOAN-ANTH180L-2310L - Survey of Physical Biological Anthropology Laboratory (1)
  - FOAN 232 - Survey of Forensic Science (2) and FOAN 232L - Survey of Forensic Science Laboratory (1)
  - FOAN 280 - Crime Scene Processing (2)
  - FOAN 280L - Crime Scene Processing Laboratory (1)
  - FOAN 350 - Forensic Anthropology (3)
  - FOAN 480 - Professional Issues in Forensic Science (3)
  - FOAN 499 - Internship (3-4) *

Choose 6 credits from the following courses:

- FOAN 396 - Topics (3)
- FOAN 475 - Human Remains Detection and Recovery for Medico-Legal Investigations (3)
- ARKE 300 - Human Evolution (3)
- ARKE 410 - Field Methods in Archaeology (3) **
- ARKE 410L - Field Methods in Archaeology Laboratory (3) **
- BIOL 217 - Forensic Entomology (2)
- BIOL 217L - Forensic Entomology Laboratory (1)
- BIOL 410 - Human Osteology (3)***
- BIOL 410L - Human Osteology Laboratory (1)***

* The number of internship credits will be determined by whether the student takes FOAN 180/180L-ANTH 2310/2310L (4cr) or FOAN 232/232L (3cr). Either way, the student will take sufficient internship credits to bring the total of required course credits to 22.

**Prerequisites: ARKE 205 and ARKE 225, or consent of instructor

***Prerequisites: BIOL 209 and 209L, Anatomy & Physiology I

2019-20 Minor, Forensic Anthropology (M715). Posted: 442
Program Modification

Sociology: M750

Degree Type: Minor

Revision to program sheet: Yes ☑ No ☐

Description of modification:

Students are currently required to take SOCO 264 (Social Problems). We would like to make it so that they can either take SOCO 264 or SOCO 144 (Marriage and Families).

A prior modification for this program, reducing the number of credit hours from 24 to 21, was accepted by UCC on 11/15/2018.

A prior proposal reducing the required number of hours in this program from 24 to 21 was approved by UCC on 11/15/2018.

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☐ No ☑

Discussions with affected departments:

NA

Proposed by: Brenda Wilhelm, PhD

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Minor . . .
Sociology is the study of social life, social change, social organization, and the social causes and consequences of human behavior. Sociologists investigate the structure of groups, organizations, and societies, as well as how people interact within these contexts. Since all human behavior is social, the subject matter of sociology ranges widely from intimate families to hostile mobs; from organized crime to religious cults; and from the divisions of race, class and gender to the common beliefs in a culture. Sociology provides many distinctive perspectives on the social world, as well as a range of research methodologies that can be applied to virtually any aspect of social life, from corporate downsizing to problems of peace and war to the expression of emotion and beyond. Because sociology addresses the most challenging issues of our time, it is an expanding field whose potential is increasingly tapped by those who craft policies and create social programs.

Sociology majors gain important skills in critical thinking, research methods, and responsible citizenship. Students who minor in sociology develop an understanding of social behavior and social organization that is useful in any career path they choose.

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a minor. Meeting with an academic advisor is essential in planning courses and developing a suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended minor.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a minor. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head for the minor. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
A minor cannot be awarded by itself. It must be combined with a baccalaureate degree outside the major field of study. Students should follow the graduation process outlined for the baccalaureate degree and list their majors and minors on the “Intent to Graduate” form.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL MINOR REQUIREMENTS
The following institutional requirements apply to all CMU minors. Specific programs may have different requirements that must be met in addition to institutional requirements.

- A minor consists of 15-24 semester hours. There may be prerequisites required for the minor which will increase the total number of credit hours for a student who has not already taken those prerequisites.
- Courses taken to satisfy Essential Learning, major requirements, or electives can be counted toward the minor if applicable.
- At least 33 percent of the credit hours required for the minor must be in courses numbered 300 or above.
- At least 25 percent of the classes must be taken at CMU.
- 2.00 cumulative GPA or higher for the courses used for the minor.
- A minor is not a degree by itself and must be earned at the same time as a baccalaureate degree.
- A minor must be outside the major field of study.
- A student may earn up to five minors with any baccalaureate degree at CMU.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements sheet you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC MINOR REQUIREMENTS

- 214 semester hours for the Minor in Sociology.

REQUIRED COURSES FOR THE SOCIOLOGY MINOR (214 semester hours)

- SOCO 202 - Introduction to Sociological Inquiry (3)
- SOCO 260 - General Sociology (3)
- SOCO 144 – Marriage and Families (3) or SOCO 264 - Social Problems (3)

125 semester hours of Upper Division Sociology (SOCO) courses:

- SOCO
- SOCO
- SOCO
- SOCO
- SOCO
- SOCO
Program Modification

History-Secondary Education: 3704

Degree Type: BA

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Add program requirement about passing Praxis II prior to student teaching (internship) semester.
3. All other changes approved by UCC. The above are additional changes.

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.

Revision to SLOs: Yes ☑ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☑ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:
The Social and Behavioral Sciences Department and The Center for Teacher Education have both approved these changes as of January 29, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Arts
Major: History
Concentration: Secondary Education

About This Major . . .
The Center for Teacher Education offers a comprehensive program of study that leads to licensure in Colorado. Our professors are experienced, knowledgeable, accessible, and dedicated to the improvement of public education. At Colorado Mesa University, we pride ourselves on the personal touch. Faculty offer one-on-one guidance for course selection, field placements, student teaching, and employment. Our mission is to develop Educators as Innovators; we are always looking to improve the quality of learning in our programs and K-12 schools.

As a student, you will gradually accumulate over 200 hours of classroom experience before beginning student teaching. School districts throughout western Colorado provide opportunities to gain experience with children of all ages and backgrounds in a variety of school settings.

The secondary licensure program provides teacher education candidates with broad content knowledge in history and prepares them as teachers for grades 7 through 12. A minimum of 75 credit hours of Essential Learning and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education secondary licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria. EDUC 115 and EDUC 215 must be taken before applying to the program.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

**History Outcomes:**
1. Formulate the relationships of cause and effect (Specialized Knowledge/Applied Learning);
2. Assess the importance of historical context (Specialized Knowledge/Applied Learning);
3. Critically analyze an argument based on secondary sources (Critical Thinking);
4. Critically analyze primary sources (Critical Thinking);
5. Formulate a clear and persuasive argument based on evidence (Communication Fluency);
6. Construct a clear thesis with strong topic sentences (Communication Fluency).

**Teacher Education Outcomes:**
1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)
6. Instruct students based on self-written learning plans to address individual learning and developmental patterns. (Specialized Knowledge)
7. Design a safe and supportive learning environment for elementary and secondary education students. (Applied Learning)
8. Apply content knowledge while working with learners to access information in real-world settings ensuring learner mastery of the content. (Specialized Knowledge)
Integrate assessment, planning, and instructional strategies in coordinated and engaging ways through multiple means of communication. (Critical Thinking/Communication Fluency)

Engage in meaningful and intensive professional learning and self-renewal by regularly examining practice through ongoing study, self-reflection, and collaboration. (Applied Learning)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student's petition for graduation is denied, it will be her/his responsibility to consult the Registrar's Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 60 of the last 84 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 60 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.80 cumulative GPA or higher in all CMU coursework.
- A grade of "C" or better must be earned in all required courses, unless otherwise stated.
- All EDUC prefix courses must be completed with a grade of "B" or better.
Students must pass the PRAXIS II exam in the content area prior to beginning the internship. Also, all other coursework toward the degree must be successfully completed prior to the internship.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of "B" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- ECON 201 - Principles of Macroeconomics (3)
- PSYC 233 - Human Growth and Development (3) (Must receive grade of "B" or higher)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- HIST 131 - United States History (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (6 semester hours, must earn a grade of "C" or higher in each course.)
Two consecutive courses in the same foreign language. FLAS 114 and 115 will NOT fulfill this requirement.
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[27x130]2019-20 BA, History, Secondary Education (3704). Posted:
BACHELOR OF ARTS: HISTORY SECONDARY TEACHING REQUIREMENTS (77 semester hours)

Social Science Core (9 semester hours)
- ANTH 202 - Introduction to Anthropology (3)
- GEOG 103 - World Regional Geography (3)
- One of the following courses:
  - POLS 101 - American Government (3)
  - POLS 261 - Comparative Politics (3)

History Core (15 semester hours)
- HIST 101 - Western Civilizations I (3)
- HIST 102 - Western Civilizations II (3)
- HIST 132 - United States History II (3)
- HIST 202 - Introduction to Historical Research (3)
- HIST 404 - Senior Seminar in Historical Research (3) (Grade of "C" or higher required)

History Electives (24 semester hours)

European History - Two of the following courses:
- HIST 300 - History of England to 1660 (3)
- HIST 301 - History of Modern Britain (3)
- HIST 302 - History of Modern France (3)
- HIST 303 - History of Modern Germany (3)
- HIST 330 - History of 19th Century Europe (3)
- HIST 331 - The 20th Century (3)
- HIST 350 - Renaissance and Reformation (3)
- HIST 360 - Medieval Europe (3)
- HIST 400 - The Soviet Union and Eastern Europe (3)
- HIST 430 - The Ancient Mediterranean World (3)
- HIST 445 - The Holocaust (3)
- HIST 450 - European History and Film (3)
- ____________________________________________________________________________
- ____________________________________________________________________________

World History - One of the following courses:
- HIST 310 - Latin American Civilization (3)
- HIST 333 - The International History of the Cold War (3)
- HIST 334 - History of the British Empire (3)
- HIST 340 - History of the Middle East (3)
- HIST 403 - East Asia and the Modern World (3)
- ____________________________________________________________________________

United States History - Two of the following courses:
- HIST 342 - The Early American Republic (3)
- HIST 344 - The Age of Industry in America (3)
- HIST 345 - The History of Immigration, Race, and Ethnicity in America (3)
- HIST 346 - The 1950’s and 1960’s (3)
- HIST 370 - Early U.S. Women’s History (3)
- HIST 371 - 20th Century U.S. Women’s History (3)
- HIST 415 - Colonial America (3)
- HIST 416 - The American Revolution (3)
- HIST 420 - Civil War (3)
- ____________________________________________________________________________
- ____________________________________________________________________________

2019-20 BA, History, Secondary Education (3704). Posted:
Topical History - Two of the following courses:

- HIST 305 - The Old South (3)
- HIST 315 - American Indian History (3)
- HIST 316 - American Slavery (3)
- HIST 320 - The American West (3)
- HIST 332 - History of Modern Warfare (3)
- HIST 355 - Ancient and Medieval Cities (3)
- HIST 375 - American Sports History (3)
- HIST 394 – Junior Seminar in Historiography (3)
- HIST 405 - Introduction to Public History (3)
- HIST 409 – Material Culture Studies (3)
- HIST 410 - Environmental History (3)
- HIST 425 - The History of Sexuality (3)
- HIST 435 - Classical Archaeology (3)
- HIST 440 - Early & Medieval Christianity (3)

Free Elective - Select any Upper Division History Course

Secondary Education Requirements (29 semester hours, must earn a "B" or better in all courses.)

Program Requirements: ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215 (all with a grade of "B" or better) and formal acceptance to the Teacher Education Program

- EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
- EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3) (20 field experience hours)
- EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
- EDUC 442 - Integrating Literacy across the Curriculum: Secondary and K-12 Art (3) (60 field experience hours)
- EDUC 475 - Classroom Management (1)
- EDUC 497 - Content Methodology Practicum (3) (80 field experience hours)
- EDUC 497B - Methods of Teaching Secondary Social Studies (2)
  This course is only offered in the fall semester. It may be taken with either the 300-level or 400-level EDUC courses but must be taken before the student teaching semester.
- EDUC 499G - Teaching Internship and Colloquia: Secondary (12) (600 field experience hours)

Praxis II Exam Passed

All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must PASS the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.
## SUGGESTED COURSE SEQUENCING

**Freshman Year, Fall Semester: 13 credits**
- ENGL 111 - English Composition (3)
- HIST 131 - United States History I (3)
- Essential Learning - Natural Science (3)
- HIST 101 - Western Civilizations I (3)
- KINE 100 - Health and Wellness (1)

**Freshman Year, Spring Semester: 18 credits**
- ENGL 112 - English Composition (3)
- Essential Learning - Humanities (3)
- MATH 110 - College Mathematics (3) or higher
- HIST 102 - Western Civilizations II (3)
- HIST 132 - United States History II (3)
- Essential Learning - Fine Arts (3)

**Sophomore Year, Fall Semester: 16 credits**
- Foundation Course - Foreign Language (3)
- HIST 202 - Introduction to Historical Research (3)
- PSYC 233 - Human Growth and Development (3)
- POLS 101 - American Government (3) or POLS 261 - Comparative Politics (3)
- ECON 201 - Principles of Macroeconomics (3)
- EDUC 115 - What It Means to be an Educator (1)

**Sophomore Year, Spring Semester: 16 credits**
- Foundation Course - Foreign Language (3)
- Essential Learning - Natural Science with Lab (4)
- History Elective (2 courses) (6)
- GEOG 103 - World Regional Geography (3)

**Junior Year, Fall Semester: 18 credits**
- History Elective (3 courses) (9)
- ANTH 202 - Introduction to Anthropology (3)
- KINA Activity (1)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- EDUC 215 - Teaching as a Profession (1)

**Junior Year, Spring Semester: 12 credits**
- EDUC 342 - Pedagogy and Assessment: Secondary and K-12 (3)
- EDUC 343 - Teaching to Diversity (3)
- History Elective (2 courses) (6)

**Senior Year, Fall Semester: 15 credits**
- EDUC 442 - Integrating Literacy across the Curriculum: Secondary and K-12 Art (3)
- EDUC 475 - Classroom Management (1)
- EDUC 497 - Content Methodology Practicum (3)
- EDUC 497B - Methods of Teaching Secondary Social Studies (2)
- HIST 404 - Senior Seminar in Historical Research (3)
- History Elective (3)

**Senior Year, Spring Semester: 12 credits**
- EDUC 499G - Teaching Internship and Colloquia: Secondary (12)
Program Modification

Liberal Arts-Elementary Education, Social Science: 3791

Degree Type: BA

Revision to program sheet: Yes ☒ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Change "take" to "pass" on program specific requirements. (5th bullet point)
3. Add MATH 205, Elements of Mathematics II, to the list of courses required prior to being accepted into Teacher Education (last bullet on "program specific requirements on program sheet.

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.
3. Essential Learning Courses (including MATH 2015) should be completed prior to entering the Teacher Education program.

Revision to SLOs: Yes ☒ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☒ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentionally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:

The Social and Behavioral Sciences Department and The Center for Teacher Education have both approved these changes as of January 19, 2019.

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Arts
Major: Liberal Arts, Elementary Education
Concentration: Social Science

About This Major . . .
The Center for Teacher Education offers a comprehensive program of study that leads to licensure in Colorado. Our professors are experienced, knowledgeable, accessible, and dedicated to the improvement of public education. At Colorado Mesa University, we pride ourselves on the personal touch. Faculty offer one-on-one guidance for course selection, field placements, student teaching, and employment. Our mission is to develop Educators as Innovators; we are always looking to improve the quality of learning in our programs and K-12 schools.

As a student, you will gradually accumulate over 200 hours of classroom experience before beginning student teaching. School districts throughout western Colorado provide opportunities to gain experience with children of all ages and backgrounds in a variety of school settings.

The elementary licensure program provides teacher education candidates with a broad content knowledge and prepares them as teachers for grades kindergarten through six. A minimum of 60 credit hours of Essential Learning and content area coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education elementary licensure program. Please see the Teacher Education Admission Packet for further information on admissions criteria. EDUC 115 and EDUC 215 must be taken before applying to the program.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

Teacher Education Outcomes

1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)
6. Demonstrate understanding that learning and developmental patterns vary among individuals, that learners bring unique individual differences to the learning process, and that learners need supportive and safe learning environments to thrive. Apply content knowledge as they work with learners to access information, apply knowledge in real world settings, and address meaningful issues to assure learner mastery of the content. Integrate assessment, planning, and instructional strategies in coordinated and engaging ways through multiple means of communication Engage in meaningful and intensive professional learning and self-renewal by regularly examining practice through ongoing study, self-reflection, and collaboration. Synthesize concepts and research methods from different social science disciplines and apply these to particular social issues.

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning
courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:
- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.
Submission deadlines and commencement details can be found at [http://www.coloradomesa.edu/registrar/graduation.html](http://www.coloradomesa.edu/registrar/graduation.html).

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.
- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS
- 126 semester hours required for the BA in Liberal Arts, Elementary Education, Social Science.
- 2.80 cumulative GPA or higher in all CMU coursework.
- 2.80 cumulative GPA or higher in coursework toward the major content area.
- A grade of “B” or better is required for all EDUC courses.
- Foreign language proficiency must be demonstrated by high school course work (2 years), college coursework (2 semesters), or competency testing.
- Students must pass the PRAXIS II exam in the content area prior to beginning the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.
- A grade of “C” or better must be earned in all required courses, unless otherwise stated.
- ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215, and MATH 105, and MATH 205 (all with a grade of “B” or better) and formal acceptance to the Teacher Education Program.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of “B” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must be taken after MATH 105. Must receive a grade of “B” or better, must be completed by the time the student has 60 semester hours.)
- MATH 205 - Elements of Mathematics II

Humanities (3 semester hours)
- Select one Humanities course (3) (Essential Learning eligible ENGL or HIST course recommended)

Social and Behavioral Sciences (6 semester hours)
- PSYC 233 - Human Growth and Development (3) (Must earn a grade of “B” or higher)
- Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- Select one BIOL course (3)
- Select the corresponding BIOL Lab (1)
- Select one GEOL course (3)

History (3 semester hours)
- Select one History course (3) (HIST 131 or HIST 132 recommended)

Fine Arts (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

Essential Learning Capstone (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
BA, LIBERAL ARTS ELEMENTARY EDUCATION, SOCIAL SCIENCE CONCENTRATION (89 semester hours)

Elementary Education Core (36 semester hours):

Literacy and Mathematics (15 semester hours)
- ENGL 240 - Children’s Literature (3)
- ENGL 343 - Language systems and Linguistic Diversity (3)
- ENGL 451 – Understanding and Using English Grammar (3)
- MATH 105 - Elements of Mathematics I (3) (Must earn a grade of “B” or higher.)
- MATH 301 - Mathematics for Elementary Teachers (3)

Kinesiology (3 semester hours)
- KINE 321 - Physical Activity and Health in the Classroom (3)

Social Sciences (9 semester hours)
- POLS 101 - American Government (3)
- Select 2 of the following courses:
  - ARKE 205 - Principles of Archaeology (3) or ARKE 225 - Introduction to North American Archaeology (3)
  - ECON 201 - Principles of Macroeconomics (3)
  - GEOG 102 - Human Geography (3) or GEOG 103 - World Regional Geography (3)
  - HIST 101 - Western Civilizations (3)
  - HIST 131 - United States History (3)
  - HIST 132 - United States History (3)
  - HIST 225 - History of Colorado (3)
  - HIST 315 - American Indian History (3)
  - HIST 316 - American Slavery (3)
  - HIST 320 - The American West (3)
  - HIST 331 - The Age of Industry in America (3)
  - HIST 345 - History of Immigration, Race and Ethnicity in America (3)

Science (6 semester hours)
- Select natural sciences courses from approved Essential Learning list or BIOL 209 or BIOL 210:

Art (3 semester hours)
- ARTD 410 - Elementary Art Education Methods (3)

Elementary Education Concentration: Social Science (15 semester hours)

Social Science Content Area Required Courses (9 semester hours)
- HIST 102 - Western Civilizations (3)
- ANTH 202 - Introduction to Anthropology (3)
- POLS 236 - State and Local Government (3)

Social Science Concentration Electives (6 semester hours)
- Select two of the following courses:
  - HIST 300 - History of England to 1660 (3)
  - HIST 301 - History of Modern Britain (3)
  - HIST 302 - History of Modern France (3)
  - HIST 303 - History of Modern Germany (3)
HIST 330 - History of 19th Century Europe (3)
HIST 331 - The 20th Century (3)
HIST 350 - Renaissance and Reformation (3)
HIST 360 - Medieval Europe (3)
HIST 400 - The Soviet Union and Eastern Europe (3)
HIST 430 - The Ancient Mediterranean World (3)
HIST 445 - The Holocaust (3)
HIST 450 - European History and Film (3)
HIST 310 - Latin American Civilization (3)
HIST 333 - The International History of the Cold War (3)
HIST 334 - History of the British Empire (3)
HIST 340 - History of the Middle East (3)
HIST 403 - East Asia and the Modern World (3)
HIST 406 - History of the African Continent (3)
HIST 305 - The Old South (3)
HIST 342 - The Early American Republic (3)
HIST 344 - The Age of Industry in America (3)
HIST 345 - The History of Immigration, Race, and Ethnicity in America (3)
HIST 346 - The 1950’s and 1960’s (3)
HIST 370 - Early U.S. Women’s History (3)
HIST 371 - 20th Century U.S. Women’s History (3)
HIST 415 - Colonial America (3)
HIST 416 - The American Revolution (3)
HIST 420 - Civil War (3)
HIST 315 - American Indian History (3)
HIST 316 - American Slavery (3)
HIST 320 - The American West (3)
HIST 332 - History of Modern Warfare (3)
HIST 355 - Ancient and Medieval Cities (3)
HIST 375 - American Sports History (3)
HIST 394 - Junior Seminar in Historiography (3)
HIST 396 - Topics (1-3)
HIST 405 - Introduction to Public History (3)
HIST 409 - Material Culture Studies (3)
HIST 410 - Environmental History (3)
HIST 425 - The History of Sexuality (3)
HIST 435 - Classical Archaeology (3)
HIST 440 - Early & Medieval Christianity (3)
HIST 496 - Topics (1-3)

Elementary Education Requirements (38 semester hours) (840 field experience hours)

Program Requirements: ENGL 111, ENGL 112, PSYC 233, EDUC 115 and 215, and MATH 105 (all with a grade of B or better) and formal acceptance to the Teacher Education Program

☐ EDUC 115 - What It Means to be an Educator (1) (8 field experience hours)
☐ EDUC 215 - Teaching as a Profession (1) (12 field experience hours)
☐ EDUC 341 - Pedagogy and Assessment: K-6/Elementary (3) (20 field experience hours)
☐ EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
☐ EDUC 374 - Exceptional and English Language Learners in the Inclusive Classroom (3)
☐ EDUC 378 - Technology for K-12 Educators (1)
☐ EDUC 440 - Methods of Teaching Language and Literacy: Early Childhood (3) (40 field experience hours)
☐ EDUC 441 - Methods of Teaching Language and Literacy: Elementary (3) (80 field experience hours)
☐ EDUC 451 - Methods of Teaching Mathematics: Early Childhood/Elementary (3) (60 field experience hours)
☐ EDUC 461 - Methods of Teaching Science and Social Science: Early Childhood/Elementary (3)
☐ EDUC 471 - Educational Assessment (1)
☐ EDUC 475 - Classroom Management (1)
☐ EDUC 499C - Teaching Internship and Colloquia: Elementary (12) (600 field experience hours)

☐ Praxis II Exam Passed

All EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must PASS the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.

All EDUC prefix courses listed above must be completed with a grade of “B” or better to progress through the program sequence.
SUGGESTED COURSE SEQUENCING

**Freshman Year, Fall Semester: 16 credits**
- ENGL 111 - English Composition (3)
- Essential Learning – Fine Arts (3)
- Essential Learning – Geology (3)
- Essential Learning - History (3)
- KINA Activity (1)
- POLS 101 - American Government (3)

**Freshman Year, Spring Semester: 17 credits**
- EDUC 115 - What It Means to be an Educator (1)
- Elementary Core – Natural Sciences (3)
- ENGL 112 - English Composition (3)
- Essential Learning - Humanities (3)
- Essential Learning – Social and Behavioral Sciences (3)
- KINE 100 – Health and Wellness (1)
- MATH 105 – Elements of Math I (3)

**Sophomore Year, Fall Semester: 16 credits**
- Essential Learning - Biology (3) and Biology Lab (1)
- Elementary Core – Social Science (3)
- HIST 102 – Western Civilization (3)
- MATH 205 - Elements of Mathematics II (3)
- PSYC 233 - Human Growth and Development (3)

**Sophomore Year, Spring Semester: 17 credits**
- ANTH 202 – Introduction to Anthropology (3)
- EDUC 215 - Teaching as a Profession (1)
- Elementary Core – Natural Science (3)
- Elementary Core – Social Science (3)
- ENGL 240 - Children’s Literature (3)
- ESSL 200 - Essential Speech (1)
- ESSL 290 - Maverick Milestone (3)

**Junior Year, Fall Semester: 18 credits**
- EDUC 341 - Pedagogy and Assessment: K-6/Elementary (3)
- EDUC 343 - Teaching to Diversity (3)
- ENGL 343 – Language Systems and Linguistic Diversity (3)
- MATH 301 – Mathematics for Elementary Teachers (3)
- POLS 236 - State and Local Government (3)
- Social Science Concentration Course (3)

**Junior Year, Spring Semester: 16 credits**
- EDUC 374 - Exceptional and English Language Learners in the Inclusive Classroom (3)
- EDUC 378 - Technology for K-12 Educators (1)
- EDUC 440 - Methods of Teaching Language and Literacy: Early Childhood (3)
- ENGL 451 – Understanding and Using English Grammar (3)
- KINE 321 – Physical Activity and Health in the Classroom (3)
- Social Science Concentration Course (3)

**Senior Year, Fall Semester: 143 credits**
- ARTD 410 - Elementary Art Education Methods (3)
- EDUC 441 - Methods of Teaching Language and Literacy: Elementary (3)
- EDUC 451 - Methods of Teaching Mathematics: Early Childhood/Elementary (3)
- EDUC 461 - Methods of Teaching Science and Social Science: Early Childhood/Elementary (3)
- EDUC 471 - Educational Assessment (1)
- EDUC 475 - Classroom Management (1)

**Senior Year, Spring Semester: 123 credits**
- EDUC 475 - Classroom Management (1)
• EDUC 499C - Teaching Internship and Colloquia: Elementary (12) (600 field experience hours)
Program Modification

Early Childhood Education-Special Education: 3204

Degree Type: BA

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1. Changing Program Outcomes for Center for Teacher Education.
2. Add program requirement about passing Praxis II prior to student teaching (internship) semester.
3. All other changes approved by UCC. The above are additional changes.

Justification:
1. These new program outcomes are more closely aligned with the Colorado Department of Education's Teacher Quality Standards. These outcomes are also more general and may be used across all content areas.
2. Passing the Praxis II is a degree requirement and needs to be passed prior to student teaching.

Revision to SLOs: Yes ☑ No ☐

Teacher Education Program Outcomes:
1. Demonstrate mastery of major area's content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

The culminating assessment of the program outcomes will be the field evaluation instrument and internship portfolio. The outcomes will be assessed formatively in coursework the junior and senior years.

Other changes: Yes ☑ No ☐

The Praxis II has always been required. In order to provide some time flexibility, we changed the language a couple of years ago to say "take" before student teaching instead of "pass," which unintentinally removed it as a degree requirement. We are returning to the stricter language to avoid confusion with students and their requirements.

Discussions with affected departments:
N/A

Proposed by: Blake R. Bickham

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Arts
Major: Early Childhood Education
Concentration: Early Childhood Special Education

About This Major . . .
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As a student, you will gradually accumulate over 200 hours of classroom experience before beginning student teaching. School districts throughout western Colorado provide opportunities to gain experience with children of all ages and backgrounds in a variety of school settings.

The Early Childhood Special Education program provides teacher education candidates with a broad content knowledge and prepares them as teachers for early childhood including birth through second/third grade (birth to age 8) in an inclusive setting. A minimum of 750 credit hours of essential learning and foundation coursework must be completed with a minimum GPA of 2.80 before a candidate may apply for admission to the Center for Teacher Education program. Please see the Teacher Education Admission Packet for further information on admissions criteria.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will:

1. Demonstrate mastery of major area’s content knowledge and pedagogical strategies through fieldwork with learners in professional settings. (Specialized Knowledge/Applied Learning)
2. Design and establish a safe, inclusive, and respectful learning environment for a diverse population of students. (Specialized Knowledge/Applied Learning)
3. Plan and deliver effective instruction to students, based on research-based pedagogical practices. (Communication Literacy/Information Literacy)
4. Collect and analyze student assessment data and use results to inform planning and instruction. (Quantitative Fluency)
5. Demonstrate professionalism through ethical conduct, reflection, and leadership. (Personal and Social Responsibility)

1. Demonstrate understanding that learning and developmental patterns vary among individuals, that learners bring unique individual differences to the learning process, and that learners need supportive and safe learning environments to thrive (Specialized Knowledge).
2. Use knowledge of general and specialized curricula to individualize learning for individuals with exceptionalities. (Specialized Knowledge)
3. Integrate assessment, planning, and instructional strategies in coordinated and engaging ways through multiple means of communication to advance learning of individuals with exceptionalities. (Critical Thinking/Communication Fluency)
4. Engage in meaningful and intensive professional learning and self-renewal by regularly examining practice through ongoing study, self-reflection, and collaboration. (Applied Learning)
5. Create safe, inclusive, culturally responsive learning environments so that individuals with exceptionalities become active and effective learners and develop emotional well-being, positive social interactions, and self-determination (Specialized Knowledge/Applied Learning).
6. Collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences (Specialized Knowledge/Communication).
7. Use multiple methods of assessment and data sources in making educational decisions. (Critical Thinking/Quantitative Fluency)

Advising Process and DegreeWorks

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Students must complete the following in the first two months of the semester prior to completing their degree requirements:

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- Register for all needed courses and complete all requirements for each degree sought.

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- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 123 semester hours total for the BA in Early Childhood Education, Early Childhood Special Education.
- 2.80 cumulative GPA or higher in all CMU coursework.
- 2.80 cumulative GPA or higher in coursework toward the major content area.
- All ECSE/EDUC prefix courses must be completed with a grade of B or better.
- Students must pass the PRAXIS II exam in the content area prior to beginning the internship. Also, all other coursework toward the degree must be successfully completed prior to the internship.
- A grade of C or better must be earned in all required courses, unless otherwise stated.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of "B" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of "B" or better, must be taken after MATH 105, must be completed by the time the student has 60 semester hours.)
- MATH 205 - Elements of Mathematics II (3)

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- PSYC 150 - General Psychology (3)
  (must earn a "B" or higher)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course with a lab (4)
- Select one Natural Sciences course (3)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (30 semester hours)
- EDEC 101 - Introduction to Early Childhood (3)
- EDEC 103 - Guidance Strategies (3)
- MATH 105 - Elements of Mathematics I (3)
- EDEC 113 - Infant and Toddler Theory and Practice (3)
- EDEC 122 - Ethics in Early Childhood Education (1)
- EDEC 205 - Nutrition, Health, and Safety (3)
- EDEC 238 - Early Childhood Development, 0-8 Years (3)
- EDEC 240 - Curriculum and Development: Early Childhood (3)
- EDEC 241 - Early Childhood Administration: Human Relations (3)
- EDEC 250 - Exceptionalities in Early Education (3)
- EDEC 290 - Early Literacy for the Young Child (2)
- EDEC 365 - Working with Parents, Family, and Community Systems (3)
EARLY CHILDHOOD SPECIAL EDUCATION REQUIREMENTS (52 semester hours)

**Required Core Courses (52 semester hours - 800 field experience hours)**

- EDUC 311 - Creative and Physical Expression for Children (3)
- EDUC 340 - Pedagogical and Assessment Knowledge for Teachers: Birth-8 Years (3) (20 field experience hours)
- EDUC 343 - Teaching to Diversity (3) (20 field experience hours)
- EDUC 374 - Exceptional and English Language Learners in the Inclusive Classroom (3)
- EDUC 378 - Technology for K-12 Educators (1)
- EDUC 301 - Emergent Literacy for Early Childhood (3) (20 field experience hours)
- ECSE 320 - Learner Development and Individual Differences (3)
- ECSE 435 - Assessment and Evaluation of the Young Child: Birth-8 Years (3) (20 field experience hours)
- ECSE 320 - Learner Development and Individual Differences (3)
- ECSE 410 - Building Family and Community Partnerships (1)
- ECSE 430 - Instructional Strategies for Inclusion and Intervention (3) (20 field experience hours)
- EDUC 440 - Methods of Teaching Language and Literacy: Early Childhood (3) (40 field experience hours)
- EDUC 451 - Methods of Teaching Mathematics: Early Childhood/Elementary (3) (60 field experience hours)
- EDUC 461 - Methods of Teaching Science and Social Studies: Early Childhood/Elementary (3)
- ECSE 450 - Individual Behavior Support and Guidance with Young Learners (3)
- EDUC 490A - Teaching Internship and Colloquia for K-2 (6) (300 field experience hours)
- ECSE 499 - Teaching Internship and Colloquia for ages 3-5 (6) (300 field experience hours)
- Praxis II Exam passed.

All ECSE/EDUC prefix courses listed above must be completed with a grade of B or better to progress through the program sequence. Students must PASS the PRAXIS II exam in the content area prior to commencing the internship. Also, ALL other coursework toward the degree must be successfully completed prior to the internship.

**GENERAL ELECTIVES** (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 123 hours. 46 semester hours.)

- ________________________________
- ________________________________
- ________________________________
- ________________________________

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SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 16 credits
- ENGL 111 - English Composition (3)
- PSYC 150 - General Psychology (3)
- Essential Learning - History (3)
- EDEC 101 - Introduction to Early Childhood (3)
- EDEC 103 - Guidance Strategies (3)
- KINE 100 - Health and Wellness (1)

Freshman Year, Spring Semester: 16 credits
- ENGL 112 - English Composition (3)
- Essential Learning - Fine Arts (3)
- Essential Learning - Social/Behavioral Science (3)
- EDEC 122 - Ethics in Early Childhood Education (1)
- EDEC 238 - Early Childhood Development, 0-8 Years (3)
- Essential Learning - Natural Science (3)

Sophomore Year, Fall Semester: 17 credits
- Essential Learning - Natural Science with Lab (4)
- MATH 105 - Elements of Mathematics I (3)
- EDEC 205 - Nutrition, Health, and Safety (3)
- EDEC 240 - Curriculum and Development: Early Childhood Education (3)
- EDEC 241 - Early Childhood Administration: Human Relations (3)
- KINA Activity (1)

Sophomore Year, Spring Semester: 17 credits
- MATH 205 - Elements of Mathematics II (3)
- Essential Learning - Humanities (3)
- EDEC 290 - Early Literacy for the Young Child (2)
- General Elective (1)

Junior Year, Fall Semester: 16 credits
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- EDUC 340 - Pedagogical and Assessment Knowledge for Teachers: Birth-8 Years (3)
- EDUC 343 - Teaching to Diversity (3)
- EDUC 374 - Exceptional and English Language Learners in the Inclusive Classroom (3)
- ECSE 320 - Learner Development and Individual Differences (3)

Junior Year, Spring Semester: 16 credits
- EDUC 311 - Creative and Physical Expression for Children (3)
- EDUC 301 - Emergent Literacy for Early Childhood (3)
- General Elective (13)

Senior Year, Fall Semester: 13 credits
- EDUC 378 - Technology for K-12 Educators (1)
- EDUC 440 - Methods of Teaching Language and Literacy: Early Childhood (3)
- EDUC 451 - Methods of Teaching Mathematics: Early Childhood/Elementary (3)
- EDUC 461 - Methods of Teaching Science and Social Studies: Early Childhood/Elementary (3)
- ECSE 450 - Individual Behavior Support and Guidance with Young Learners (3)

Senior Year, Spring Semester: 12 credits
- EDUC 499A - Teaching Internship and Colloquia for K-2 (6)
- ECSE 499 - Teaching Internship and Colloquia for ages 3-5 (6)
Course Modifications

SPCH 112

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Prefix:</td>
<td>SPCH</td>
</tr>
<tr>
<td>Course No.:</td>
<td>112</td>
</tr>
<tr>
<td>Credit Hours:</td>
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<tr>
<td>Course Title:</td>
<td>Voice and Diction</td>
</tr>
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<td>Abbreviated Title:</td>
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</tr>
<tr>
<td>Times for Credit:</td>
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<td>Requirement or listed choice for any program of study:</td>
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</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Theatre  BFA,  Theatre Arts-Acting/Directing: 3265
Theatre  BFA,  Theatre Arts-Music Theatre: 3266
Theatre  Minor,  Communication Studies: M251

Course is a requirement for a new program:
na

Justification:
Renaming the course to indicate its place in the acting sequence will clarify course programming for Theatre Arts: BFA-Acting/Directing and Theatre Arts: BFA-Music Theatre majors.

Discussions with affected departments:
Course renaming was discussed and agreed upon by all affected parties in Musical Theatre, Acting/Directing and Communication Studies in November 2018.

Proposed by: Jill Van Brussel  Expected Implementation: Fall 2019
**Course Modifications**

**THEA 253**

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
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<tr>
<td>Credit Hours:</td>
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<tr>
<td>Course Title:</td>
<td>Acting III: Stage Movement</td>
<td>Acting IV: Stage Movement</td>
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<td>Abbreviated Title:</td>
<td>Acting III: Stage Movement</td>
<td>Acting IV: Stage Movement</td>
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<tr>
<td>Times for Credit:</td>
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<td>1</td>
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<tr>
<td>Prerequisites:</td>
<td>Current: THEA 156 Proposed: THEA 156, SPCH 112</td>
<td></td>
</tr>
</tbody>
</table>

Requirement or listed choice for any program of study: Yes [ ] No [X] [ ]

Change affects program sheet or grad requirements: Yes [X] No [ ] [ ]

Discussions with affected departments:

**Theatre** BFA, Theatre Arts-Acting/Directing: 3265
**Theatre** BFA, Theatre Arts-Music Theatre: 3266

Course is a requirement for a new program: na

**Justification:**

The course is being retitled to indicate its proper place in Acting course sequencing.

Discussions with affected departments:

Renaming of Acting courses has been discussed and agreed upon between affected parties in the Music Theatre and Acting/Directing Programs 11-2018.

Proposed by: Jill Van Brussel

Expected Implementation: Fall 2019
Course Modifications

THEA 256

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
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<th>Current</th>
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<tbody>
<tr>
<td>Course Prefix:</td>
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<tr>
<td>Course No.:</td>
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<tr>
<td>Credit Hours:</td>
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<td>Course Title:</td>
<td>Acting IV: Auditions</td>
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<tr>
<td>Abbreviated Title:</td>
<td>Acting IV: Auditions</td>
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<tr>
<td>Times for Credit:</td>
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</tr>
<tr>
<td>Prerequisites:</td>
<td>Current: THEA 253</td>
</tr>
<tr>
<td></td>
<td>Proposed: THEA 153, THEA 156</td>
</tr>
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</table>

Requirement or listed choice for any program of study: Yes ☑ No ❏
Change affects program sheet or grad requirements: Yes ☑ No ❏

Theatre BFA, Theatre Arts-Acting/Directing: 3265

Course is a requirement for a new program: NA

Justification:
THEA 256 (Auditions) is not offered on a regular rotation. Removing the course sequencing number allows the student to take it whenever it is offered once they have fulfilled the prerequisites providing required foundational skills (THEA 153: Acting I: Beginning Acting, THEA 156: Acting II: Contemporary Scenework).

Discussions with affected departments:
Renaming of Acting courses has been discussed and agreed upon between affected parties in the Music Theatre and Acting/Directing Programs 11-2018.

Proposed by: Jill Van Brussel

Expected Implementation: Fall 2019
Course Modifications

THEA 360

Intended semester to offer modified course for the 1st time: Fall 2019

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
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<tbody>
<tr>
<td>Course Prefix: THEA</td>
<td>Advanced Costume Technology</td>
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<tr>
<td>Course No.: 360</td>
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<td>Credit Hours: 3</td>
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<tr>
<td>Course Title: Costume Construction II</td>
<td>Advanced Costume Technology</td>
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<td>Abbreviated Title: Costume Construction II</td>
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<td>Times for Credit: 1</td>
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<td>Prerequisites:</td>
<td></td>
</tr>
<tr>
<td>Current: THEA 260</td>
<td>Proposed: THEA 103</td>
</tr>
</tbody>
</table>

Description for catalog:

Current: An introduction to developing period patterning, interpreting a rendering into finished garment, investigating ethnic styles and refining creative problem-solving skills.

Proposed: Introduction to advanced construction techniques, basic flat patterning and draping, and interpreting a rendering into a finished garment.

Requirement or listed choice for any program of study: Yes ☑ No ☐

Change affects program sheet or grad requirements: Yes ☑ No ☐

Theatre  BA,  Theatre Arts-Design/Technology: 3262

Course is a requirement for a new program:

na

Justification:

THEA 260 (Costume Construction) has been replaced with THEA 103 (Intro to Theatre Technology: Costume), and thus replaces it as a prerequisite for the course.

Course Title changed to reflect correct terminology and more correctly position it as a follow up to THEA 103 (Intro to Theatre Technology: Costume).

Course Description edited to reflect current course content.

Discussions with affected departments:

No other departments affected.

Proposed by:  Jill Van Brussel

Expected Implementation:  Fall 2019

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**Course Modifications**

**THEA 454**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Course Prefix:</strong></td>
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</tr>
<tr>
<td><strong>Course No.:</strong></td>
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<td><strong>Credit Hours:</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Course Title:</strong></td>
<td>Advanced Acting: Elizabethan Acting Techniques</td>
<td>Acting V: Shakespeare</td>
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<tr>
<td><strong>Abbreviated Title:</strong></td>
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<td>Acting V: Shakespeare</td>
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<tr>
<td><strong>Times for Credit:</strong></td>
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<td>1</td>
</tr>
<tr>
<td><strong>Prerequisites:</strong></td>
<td>Current: THEA 256</td>
<td>Proposed: THEA 253</td>
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<tr>
<td>Requirement or listed choice for any program of study:</td>
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<td>No</td>
</tr>
<tr>
<td>Change affects program sheet or grad requirements:</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Theatre**  BFA,  Theatre Arts-Acting/Directing: 3265

Course is a requirement for a new program:

NA

**Justification:**

THEA 454 (Advanced Acting: Elizabethan Acting Techniques) has previously not been offered in a set rotation. With the addition of new faculty in the specialty area, renaming the course as Acting V will indicate its regular position in the new acting class series rotation.

Further, the substitution in the title of "Shakespeare" for "Elizabethan" more accurately reflects the current course description and content, without necessitating any changes to current SLOs and topical course outlines.

**Discussions with affected departments:**

Acting/Directing faculty have discussed and agreed to this change. 11-2018.

**Proposed by:** Jill Van Brussel  
**Expected Implementation:** Fall 2019
Program Modification

Dance: 3267
Degree Type: BFA

Revision to program sheet: Yes ☑ No ☐

Description of modification:
1. Raise required semester hours of Modern Dance Technique from 4 to 6
2. Raise required semester hours of Tap Technique from 4 to 6
3. Reduce amount of required Dance electives from 8 to 4.
4. Updating the suggested course sequencing.

Justification:
Based on our student population, there is a need and desire to graduate as a well rounded dancer, equally versed in the genres of Ballet, Jazz, Modern and Tap. Currently the degree requires 6 credit hours of Ballet and Jazz and only 4 of Modern and Tap. Bringing all techniques courses up to a 6 required credits and taking the 4 credit difference out of elective dance credits will bring all the foundational genres into balance.

The updates to the suggested course sequencing reflect these changes.

Revision to SLOs: Yes ☐ No ☑

Other changes: Yes ☑ No ☐

Requiring an equal amount of training in all foundational dance technique areas will help ensure the development of more well-rounded dancers in the BFA Dance program.

Discussions with affected departments:
Dance faculty discussed and agreed 12-2018. No other departments are affected.

Proposed by: Meredith Lyons and Amanda Benzin

Expected Implementation: Fall 2019
About This Major . . .
The Department of Theatre Arts offers one of the most successful training degree programs in Colorado. The Bachelor of Fine Arts in Dance is focused on helping students acquire a sound understanding of the performing arts in state-of-the-art facilities. Dance at CMU is thriving, with an array of dance styles, performance opportunities and travel. Modern, jazz, ballet and tap are offered from beginning to professional levels. Other courses include composition, improvisation, pedagogy, history, music analysis, healthy dancer and repertory performance.

The faculty members have professional backgrounds in all forms of dance and musical theatre. With four dance concerts a year, Colorado Mesa University provides students with a chance to choreograph original works and to dance for and with visiting guest artists from the professional dance world. Students travel throughout the United States to share the art of dance with other universities and colleges. Dance at Colorado Mesa University features courses with an emphasis on positive reinforcement from challenging professors and a strong technical foundation. It is a place where dancers can establish lifelong relationships as they strive for excellence in the art of dance.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Communicate verbally contemporary and enduring concepts concerning Human Culture through participation and/or observation of the performing arts and speech. (Specialized Knowledge/ Communication)
2. Communicate non-verbally contemporary and enduring concepts concerning Human Culture through participation and/or observation of the performing arts and speech. (Specialized Knowledge/ Communication)
3. Create progressively more challenging projects through the use of intellectual and/or practical skills. (Applied Learning)
4. Demonstrate teamwork and problem solving skills through collaboration and cooperation on creative projects. (Critical Thinking)
5. Demonstrate the knowledge, skills, and versatility of the discipline from conceptualization to application. (Applied Learning)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html. If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS
- 2.0 cumulative GPA or higher in coursework toward the major content area.
- Must receive a grade of “C” or higher in foundation courses.
ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

Humanities (3 semester hours)
- Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

History (3 semester hours)
- Select one History course (3)

Fine Arts (3 semester hours)
- Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

Essential Learning Capstone (27 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

FOUNDATION COURSES (12 semester hours, must pass all courses with a grade of “C” or higher.)
- THEA 153 - Acting I: Beginning Acting (3)
- DANC 225 - The Healthy Dancer (3)

Two consecutive classes in the same foreign language. FLAS 114 & 115 will NOT fulfill this requirement.
- 
- 

2019-20 BFA, Dance (3267). Posted:
**BFA: DANCE REQUIREMENTS** (58 semester hours)

**Dance Core** (23 semester hours)
- DANC 250 - Dance Improvisation (2)
- DANC 255 - Choreography (3)
- DANC 310 - Dance Pedagogy (3)
- DANC 315 - History and Philosophy of Dance I (3)
- DANC 316 - History and Philosophy of Dance II (3)
- DANC 328 - Music Analysis for Dance (3)
- THEA 401 - Career Preparation (3)
- DANC 494 - Senior Dance Capstone (3)

**Ballet Technique Courses** (6 semester hours)
Select three of the following courses:
- DANC 234 - Ballet IIA (2)
- DANC 235 - Ballet IIB (2)
- DANC 334 - Ballet IIIA (2)
- DANC 335 - Ballet IIIB (2)
- DANC 434 - Ballet IVA (2)
- DANC 435 - Ballet IVB (2)

**Jazz Technique Courses** (6 semester hours)
Select three of the following courses:
- DANC 232 - Jazz IIA (2)
- DANC 233 - Jazz IIB (2)
- DANC 332 - Jazz IIIA (2)
- DANC 333 - Jazz IIIB (2)
- DANC 432 - Jazz IVA (2)
- DANC 433 - Jazz IVB (2)

**Tap Technique Courses** (4 semester hours)
Select three of the following courses:
- DANC 184 - Tap I (2)
- DANC 236 - Tap IIA (2)
- DANC 237 - Tap IIB (2)
- DANC 336 - Tap IIIA (2)
- DANC 337 - Tap IIIB (2)
- DANC 436 - Tap IVA (2)
- DANC 437 - Tap IVB (2)

**Modern Technique Courses** (6 semester hours)
Select two of the following courses:
- DANC 183 Modern I (2)
- DANC 230 Modern IIA (2)
- DANC 231 Modern IIB (2)
- DANC 330 Modern IIIA (2)
- DANC 331 Modern IIIB (2)
- DANC 430 Modern IVA (2)
DANC - 431 Modern IVB (2)

Additional Technique Courses (48 semester hours)
Select eight four additional semester hours of technique (excluding performance courses):

Performance/Choreography Options (4 semester hours)
Select four of the following courses:
- DANC 156 – Dance Performance (1)
- DANC 256 – Dance Performance (1)
- DANC 356 – Dance Performance (1)
- DANC 456 – Dance Performance (1)
- DANC 290 – Choreography Practicum I (1)
- DANC 390 – Choreography Practicum II (1)
- DANC 490 – Choreography Practicum III (1)

Dance Support Courses (3 semester hours)
Select three semester hours from ANY Theatre or Dance course:

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours, including 40 upper division hours. 13 semester hours, additional hours of upper division may be needed.)
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 14 credits
- ENGL 111 - English Composition (3)
- MATH 110 - College Mathematics (3) or higher
- KINE 100 - Health and Wellness (1)
- THEA 153 - Beginning Acting (3)
  - Dance Technique Course (2)
  - Dance Technique Course (2)
  - Ballet Course (2)
  - Jazz Course (2)

Freshman Year, Spring Semester: 15 credits
- ENGL 112 - English Composition (3)
- Essential Learning - History (3)
- Essential Learning - Fine Arts (3)
- KINA Activity (1)
  - Dance Technique Course (2)
  - Dance Technique Course (2)
  - Ballet Course (2)
  - Jazz Course (2)
  - Performance Option (1)

Sophomore Year, Fall Semester: 15 credits
- Essential Learning - Social and Behavioral Sciences (3)
- Foundation Course - Foreign Language (3)
- DANC 225 - The Healthy Dancer (3)
- DANC 250 - Dance Improvisation (2)
  - Dance Technique Course (2)
  - Dance Technique Course (2)
  - Ballet Course (2)
  - Jazz Course (2)

Sophomore Year, Spring Semester: 15 credits
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- Foundation Course - Foreign Language (3)
- DANC 255 - Choreography (3)
  - Dance Technique Course (2)
  - Dance Technique Course (2)
  - Tap Dance Course (2)
  - Performance Option (1)
  - Modern Dance Course (2)

Junior Year, Fall Semester: 16 credits
- Essential Learning - Natural Science (3)
- DANC 310 - Dance Pedagogy (3)
  - Tap Dance Course (2)
  - Modern Dance Course (2)
  - Dance Technique Course (2)
  - General Electives (4)

Junior Year, Spring Semester: 15 credits
- Essential Learning - Humanities (3)
- Essential Learning - Natural Science with Lab (4)
- DANC 328 - Musical Analysis for Dancers (3)
- Dance Technique Course (2)
- General Elective (2)
Senior Year, Fall Semester: 15 credits
- Essential Learning - Social and Behavioral Sciences (3)
- DANC 315 - History and Philosophy of Dance I (3)
- THEA 401 - Career Preparation (3)
- Dance Technique Courses (4)
- General Elective (3)
- Performance Option (1)

Senior Year, Spring Semester: 15 credits
- General Electives (4)
- DANC 494 - Dance Capstone (3)
- Dance Technique Course (2)
- Support Course (3)
- DANC 316 - History and Philosophy of Dance II (3)
Program Modification

Theatre Arts-Acting/Directing: 3265

Degree Type: BFA

Revision to program sheet: Yes ☑  No ☐

Description of modification:
1. SPCH 112 (Voice and Diction) - renamed SPCH 112 (Acting III: Voice and Diction) (COURSE MOD)
2. THEA 253 (Acting III: Stage Movement) - renamed THEA 253 (Acting IV: Stage Movement) (COURSE MOD)
3. THEA 256 (Acting IV: Auditions) - renamed THEA 256 (Auditions) (COURSE MOD)
4. THEA 454 (Advanced Acting: Elizabethan Acting Techniques) renamed THEA 454 (Acting V: Shakespeare) (COURSE MOD)
5. Updating of program sheet to reflect actual name of THEA 153 (Acting I: Beginning Acting), currently listed only as Beginning Acting. (REVISED PROGRAM SHEET)
6. Revision of suggested course sequencing to reflect changes in course numbering/rotations. (REVISED PROGRAM SHEET)

Justification:
Although content remains the same, Acting courses have been renamed to clarify proper sequencing and reflect revised course rotations.

Revision to SLOs: Yes ☐  No ☑

Other changes: Yes ☑  No ☐

Discussions with affected departments:
Acting/Directing faculty have discussed and agreed on proposals. No other programs are affected (with the exception of minor course name changes on program sheets for Minor in Communication Studies and BFA Theatre Arts: Music Theatre.)

Proposed by: Jill Van Brussel

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Fine Arts
Major: Theatre Arts
Concentration: Acting/Directing

About This Major . . .
The Department of Theatre Arts offers one of the most successful theatre training degree programs in Colorado. Theatre Arts majors choose from two distinct concentrations in the Bachelor of Fine Arts degree in Theatre Arts (Acting/Directing or Music Theatre), 2 concentrations of the BA (Theatre Arts or Design/Technology) or the BFA in Dance and acquire a sound understanding of the performing arts in state-of-the-art facilities.

The Acting/Directing concentration is constructed to help students meet the rigorous demands of a professional acting career and provide a strong foundation and practical experience for future directors. Beginning with the first semester, students enroll in performance courses taught by academically and professionally experienced faculty. Unlike larger institutions, acting opportunities in all productions at Colorado Mesa University are open to motivated and talented freshmen. In acting courses, students are exposed to techniques and approaches that are industry standards today. Training is grounded in Stanislavski, Cohen, and Chekhov. Voice and movement courses are complemented by performance opportunities in student in faculty directed productions. Acting students also audition for one act plays directed by directing students each year. Experimental and other challenging productions are offered at the Mesa Experimental Theatre.

Colorado Mesa is strategically located at the hub of a circle of important entertainment centers such as Aspen, Telluride, Moab, and Park City, Utah. There are regional theatres of international repute within driving distance, such as the Utah Shakespeare Festival, the Denver Center for the Performing Arts, and the Colorado Shakespeare Festival. There is a thriving theatrical scene in Grand Junction that offers opportunities for summer employment, including CMU's own Mesa Repertory Theatre. At Colorado Mesa, we are committed to the philosophy of training theatrical entrepreneurs. We offer low teacher-to-student ratios so that personal attention and mentoring are possible. Our many graduates in the industry have informed us that Colorado Mesa's approach was invaluable.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Communicate verbally contemporary and enduring concepts concerning Human Culture through participation and/or observation of the performing arts and speech. (Specialized Knowledge/ Communication)
2. Communicate non-verbally contemporary and enduring concepts concerning Human Culture through participation and/or observation of the performing arts and speech. (Specialized Knowledge/ Communication)
3. Create progressively more challenging projects through the use of intellectual and/or practical skills. (Applied Learning)
4. Demonstrate teamwork and problem solving skills through collaboration and cooperation on creative projects. (Critical Thinking)
5. Demonstrate the knowledge, skills, and versatility of the discipline from conceptualization to application. (Applied Learning)

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.
Graduation Process
Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar's Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS
The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.0 cumulative GPA or higher in coursework toward the major content area.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)
See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of "C" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (18 semester hours, Theatre courses must be completed prior to the student’s junior year)
- THEA 130 - Script Analysis (3)
- THEA 153 - Acting I: Beginning Acting (3)
- SPCH 112 - Acting III: Voice and Diction (3)

Three of the following courses:
- THEA 102 - Introduction to Theatre Technology: Stagecraft (2)
- THEA 103 - Introduction to Theatre Technology: Costume (2)
- THEA 104 - Introduction to Theatre Technology: Lighting (2)
- THEA 105 - Introduction to Theatre Technology: Sound Technology (2)

Select one class in a foreign language. FLAS 114 & 115 will NOT fulfill this requirement. Must receive a grade of "C" or better.
- ____________________________________________

2019-20 BFA, Theatre Arts, Acting/Directing (3265). Posted:
BFA: THEATRE ARTS, ACTING/DIRECTING REQUIREMENTS (52 semester hours)

Theatre Core (34 semester hours)

☐ Select one of the following courses:
   THEA 117 - Play Production (1)
   THEA 118 - Play Production (1)
☐ THEA 142 - Make-Up (3)
☐ THEA 145 - Introduction to Dramatic Literature (3)
☐ THEA 156 - Acting II: Contemporary Scenework (3)
☐ Select one of the following courses:
   THEA 217 - Play Production (1)
   THEA 218 - Play Production (1)
☐ THEA 253 - Acting IV: Stage Movement (3)
☐ THEA 256 - Acting IV: Auditions (3)
☐ Select one of the following courses:
   THEA 317 - Play Production (1)
   THEA 318 - Play Production (1)
☐ THEA 331 - Theatre History I: 400 B.C. to 1642 (3)
☐ THEA 332 - Theatre History II: 1642 to Present (3)
☐ THEA 381 - Directing I (3)
☐ Select one of the following courses:
   THEA 417 - Play Production (1)
   THEA 418 - Play Production (1)
☐ THEA 401 - Career Preparation (3)
☐ THEA 494 - Performance Seminar: Acting/Directing and Musical Theatre Capstone (3)
☐ THEA 353 - Advanced Acting: Styles in Acting (3)
☐ THEA 454 - Advanced Acting V: Elizabethan Acting Techniques Shakespeare (3)

Advanced Acting (9 semester hours)
Select 9 semester hours from the following options:

THEA 300 - Advanced Acting: Stage Combat (2)
THEA 354 - Advanced Acting: The Meisner Approach (3)
THEA 356 - Advanced Acting: Dialects (3)
THEA 369 - Improvisation (2)
THEA 453 - Advanced Acting: Acting for the Camera (3)
THEA 459 - Advanced Acting: Chekhov Technique (3)

Theatre Options (6 semester hours)
Select two of the following courses:

THEA 322 - Stage Management (3)
THEA 345 - World Drama (3)
THEA 380 - Playwriting I (3)
THEA 382 - Directing II (3)
THEA 411 - American Drama (3)
THEA 412 - Contemporary Drama (3)
ENGL 355 - Shakespeare (3)
Performance Options (3 semester hours)
Select three of the following courses:
   THEA 119, 120, 219, 220, 319, 320, 419, 420 - Technical Performance (1)
   THEA 147, 148, 247, 248, 347, 348, 447, 448 - Drama Performance (1)
   DANC 156, 256, 356, 456 - Dance Performance (1)

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours, including 40 upper division hours. 7 semester hours, additional hours of upper division hours may be needed.)

☐ ____________________________________________
☐ ____________________________________________
☐ ____________________________________________
☐ ____________________________________________
SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 16-17 credits
- ENGL 111 - English Composition (3)
- MATH 110 - College Mathematics (3) or higher
- Essential Learning - History (3)
- THEA 117 - Play Production (fall or spring) (1)
- THEA 153 - Acting I: Beginning Acting (3)
- THEA 102 - Intro to Theatre Tech: Scenic (2)
- THEA 103 - Intro to Theatre Tech: Costume (2)

Freshman Year, Spring Semester: 14-15 credits
- ENGL 112 - English Composition (3)
- THEA 118 - Play Production (fall or spring) (1)
- THEA 130 - Script Analysis (3)
- THEA 145 - Introduction to Dramatic Literature (3)
- THEA 156 - Acting II: Contemporary Scenework (3)
- THEA 104 - Intro to Theatre Tech: Lighting (2) or THEA 105 - Intro to Theatre Tech: Sound (2)

Sophomore Year, Fall Semester: 14-15 credits
- SPCH 112 - Acting III: Voice and Diction (3)
- Foundation Course - Foreign Language (3)
- Essential Learning - Fine Arts (3)
- KINE 100 - Health and Wellness (1)
- THEA 217 - Play Production (fall or spring) (1)
- THEA 253 - Acting III: Stage Movement (3)
- Essential Learning - Natural Science (3)
- Performance Option (1)

Sophomore Year, Spring Semester: 15-16 credits
- Essential Learning - Natural Science (3)
- Essential learning - Humanities (3)
- THEA 253 - Acting IV: Stage Movement (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- KINA Activity (1)
- THEA 218 - Play Production (fall or spring) (1)
- Theatre Option (3)
- THEA 256 - Acting IV: Auditions (3)
- Performance Option (1)

Junior Year, Fall Semester: 16-17 credits
- Essential Learning - Social/Behavioral Sciences (3)
- THEA 317 - Play Production (fall or spring) (1)
- THEA 331 - Theatre History I (3)
- THEA 381 - Directing I (3)
- Theatre Option (3)
- THEA 454 - Acting V: Shakespeare (3)
- THEA 353 - Advanced Acting: Styles (3)
- Performance Option (1)

Junior Year, Spring Semester: 15-16 credits
- Essential Learning - Social/Behavioral Sciences (3)
- THEA 142 - Make-Up (3) or THEA 152 - Costuming (3)
- THEA 318 - Play Production (fall or spring) (1)
- THEA 332 - Theatre History II (3)
- Advanced Acting Option (3)
- Theatre Option (3) THEA 353 - Advanced Acting: Styles (3) or THEA 256 - Auditions (3)
Senior Year, Fall Semester: 16-17 credits

- Essential Learning - Natural Science with Lab (4)
- THEA 401 - Career Preparation (3)
- THEA 417 - Play Production (fall or spring) (1)
- Advanced Acting Option (3)
- General Electives (6)

Senior Year, Spring Semester: 16-17 credits

- THEA 418 - Play Production (fall or spring) (1)
- THEA 494 - Performance Seminar: Acting/Directing and Musical Theatre Capstone (3)
- Advanced Acting Option (3)
- THEA 454 - Advanced Acting: Elizabethan Acting Techniques (3) or THEA 256 Auditions (3)
- General Electives (7)
Program Modification

Theatre Arts-Music Theatre: 3266

Degree Type: BFA

Revision to program sheet: Yes ☑ No ☐

Description of modification:

Program Sheet revisions to the following course names:

- SPCH 112 (Voice and Diction) to SPCH 112 (Acting III: Voice and Diction)
- THEA 253 (Acting III: Stage Movement) to THEA 253 (Acting IV: Stage Movement)
-THEA 153 (Acting I to Acting I: Beginning Acting) (program sheet cleanup - was mistitled)

Justification:

Updates to reflect course name changes.

Revision to SLOs: Yes ☑ No ☐

Other changes: Yes ☑ No ☐

Discussions with affected departments:

Acting/Directing and Music Theatre programs discussed and agreed 11-2018.

Proposed by: Jill Van Brussel

Director of Teacher Education Signature: 

Expected Implementation: Fall 2019
2019-2020 PROGRAM REQUIREMENTS
Degree: Bachelor of Fine Arts
   Major: Theatre Arts
   Concentration: Music Theatre

About This Major...

The Department of Theatre Arts offers one of the most successful theatre training degree programs in Colorado. Theatre Arts majors choose from two distinct concentrations in the Bachelor of Fine Arts degree in Theatre Arts (Acting/Directing or Music Theatre), 2 concentrations of the BA (Theatre Arts or Design/Technology) or the BFA in Dance and acquire a sound understanding of the performing arts in state-of-the-art facilities.

The Music Theatre concentration provides strong technical foundations in Music, Theatre, and Dance. This approach is to create "triple threats" and enhance the young performer's potential for an exciting career in Musical Theatre. Students begin training with music theory and ear training, private voice instruction, choir and class piano. Acting I and II, Ballet and Tap are also included to complete first year academic requirements. To complement technical courses, students also participate in a wide variety of performance related assignments which include two Main stage productions, Experimental Theatre productions, choral ensembles, dance concerts, student directed one-acts, and technical crew assignments.

Students continue interdisciplinary course work in audition techniques and resume writing, as well as preparing and performing Vocal/Acting auditions and specialty performances throughout their next three years. The Music Theatre concentration offers highly personalized instruction from skilled professors who are seasoned performers, coaches, directors, teachers, and technicians; working graduates cite this as the prime reason for their success in gaining employment in both local and national venues. Music Theatre graduates currently work on Broadway, Off-Broadway, in National Broadway tours, Regional Theatres, dinner theatres, cruise ships, and with Disney and Universal Studios.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Communicate verbally contemporary and enduring concepts concerning Human Culture through participation and/or observation of the performing arts and speech. (Specialized Knowledge/ Communication Fluency)
2. Communicate non-verbally contemporary and enduring concepts concerning Human Culture through participation and/or observation of the performing arts and speech. (Specialized Knowledge/ Communication Fluency)
3. Create progressively more challenging projects through the use of intellectual and/or practical skills. (Applied Learning)
4. Demonstrate teamwork and problem solving skills through collaboration and cooperation on creative projects. (Critical Thinking)
5. Demonstrate the knowledge, skills, and versatility of the discipline from conceptualization to application. (Applied Learning)

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. Some courses are critical to complete in specific semesters, while others may be moved around. Meeting with an academic advisor is essential in planning courses and altering the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended degree(s).

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Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

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- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at http://www.coloradomesa.edu/registrar/graduation.html.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.

INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU baccalaureate degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 40 upper-division credits (an alternative credit limit applies to the Bachelor of Applied Science degree).
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree; A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC DEGREE REQUIREMENTS

- 2.0 cumulative GPA or higher in coursework toward the major content area.
- Students deficient in piano skills will be required to complete MUSA 130 - Classical Piano I (2) and MUSA 131 - Classical Piano II (2). MUSA 130 and MUSA 131 may be taken as lower division electives or Musical Theatre Support Courses.
- Students deficient in theory skills will be required to complete MUSA 113 - Fundamentals of Theory before taking MUSA 114 - Theory I: Introduction. MUSA 113 may be taken as a lower division elective or a Musical Theatre Support Course.
- Students are required to participate in exit examinations and other programs deemed necessary to comply with the college accountability requirement.
**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

**English** (6 semester hours, must receive a grade of "C" or better and must be completed by the time the student has 60 semester hours.)
- ENGL 111 - English Composition (3)
- ENGL 112 - English Composition (3)

**Mathematics** (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- MATH 110 - College Mathematics (3) or higher

**Humanities** (3 semester hours)
- Select one Humanities course (3)

**Social and Behavioral Sciences** (6 semester hours)
- Select one Social and Behavioral Sciences course (3)
- Select one Social and Behavioral Sciences course (3)

**Natural Sciences** (7 semester hours, one course must include a lab)
- Select one Natural Sciences course (3)
- Select one Natural Sciences course with a lab (4)

**History** (3 semester hours)
- Select one History course (3)

**Fine Arts** (3 semester hours)
- Select one Fine Arts course (3)

**OTHER LOWER-DIVISION REQUIREMENTS**

**Wellness Requirement** (2 semester hours)
- KINE 100 - Health and Wellness (1)
- Select one Activity course (1)

**Essential Learning Capstone** (4 semester hours)
Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)

**FOUNDATION COURSES** (12 semester hours)
- THEA 142 - Make-Up (3)
- THEA 153 - Acting I: Beginning Acting (3)
- SPCH 112 - Acting Ill: Voice and Diction (3)

One class in a foreign language. FLAS 114 & 115 will NOT fulfill this requirement. Must receive a grade of "C" or higher.

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BFA: THEATRE ARTS, MUSIC THEATRE REQUIREMENTS (58 semester hours)

Music Theatre Core (39 semester hours)
- Select one of the following courses:
  - THEA 117 - Play Production (1)
  - THEA 118 - Play Production (1)
  - THEA 156 - Acting II: Contemporary Scenework (3)
  - THEA 253 - Acting IV: Stage Movement (3)
  - THEA 255 - Music Theatre Techniques (3)
  - THEA 341 - Music Theatre History and Literature (3)
  - THEA 355 - Music Theatre Repertoire (3)
  - THEA 401 - Career Preparation (3)
  - THEA 494 - Performance Seminar: Acting/Directing and Musical Theatre Capstone (3)
  - MUSA 114 - Theory I: Introduction (3)
  - MUSA 116 - Ear Training/Sight Singing I (2)
  - MUSL 137 - Voice Lessons (1)
  - MUSL 137 - Voice Lessons (1)
  - MUSL 237 - Voice Lessons (1)
  - MUSL 237 - Voice Lessons (1)
  - MUSL 337 - Voice Lessons (1)
  - MUSL 337 - Voice Lessons (1)
  - MUSL 437 - Voice Lessons (1)
  - MUSL 437 - Voice Lessons (1)
  - THEA 116 - Music Theatre Workshop (1)
  - THEA 216 - Music Theatre Workshop (1)
  - THEA 316 - Music Theatre Workshop (1)
  - THEA 416 - Music Theatre Workshop (1)

Ballet Technique Courses (4 semester hours)
Select two of the following courses:
- DANC 181 - Ballet I (2)
- DANC 234 - Ballet IIA (2)
- DANC 235 - Ballet IIB (2)
- DANC 334 - Ballet IIA (2)
- DANC 335 - Ballet IIB (2)
- DANC 434 - Ballet IVA (2)
- DANC 435 - Ballet IVB (2)
- ________________________________
- ________________________________

Jazz Technique Courses (4 semester hours)
Select two of the following courses:
- DANC 182 - Jazz I (2)
- DANC 232 - Jazz IIA (2)
- DANC 233 - Jazz IIB (2)
- DANC 332 - Jazz IIA (2)
- DANC 333 - Jazz IIB (2)
- DANC 432 - Jazz IVA (2)
- DANC 433 - Jazz IVB (2)
- ________________________________
- ________________________________
Tap Technique Courses (4 semester hours)
Select two of the following courses:
- DANC 184 - Tap I (2)
- DANC 236 - Tap IIA (2)
- DANC 237 - Tap IIB (2)
- DANC 336 - Tap IIIA (2)
- DANC 337 - Tap IIIB (2)
- DANC 436 - Tap IVA (2)
- DANC 437 - Tap IVB (2)

Performance Options (3 semester hours)
Select three of the following courses:
- THEA 119, 120, 219, 220, 319, 320, 419, 420 - Technical Performance (1)
- THEA 147, 148, 247, 248, 347, 348, 447, 448 - Drama Performance (1)
- DANC 156, 256, 356, 456 - Dance Performance (1)

Music Theatre Support Courses (4 semester hours)
Select four semester hours from ANY Theatre, Music, or Dance course:

GENERAL ELECTIVES (All college level courses appearing on your final transcript, not listed above that will bring your total semester hours to 120 hours, including 40 upper division hours. 13 semester hours, additional hours of upper division may be needed.)
### SUGGESTED COURSE SEQUENCING

#### Freshman Year, Fall Semester: 16 credits
- ENGL 111 - English Composition (3)
- MUSA 114 - Theory I: Introduction (3)
- MUSA 116 - Ear Training/Sight Singing (2)
- MUSL 137 - Voice Lessons (1)
- THEA 117 - Play Production (1)
- THEA 153 - Acting I: Beginning Acting (3)
- DANC - Tap/Jazz/Ballet (2)
- Performance Option (1)

#### Freshman Year, Spring Semester: 14 credits
- ENGL 112 - English Composition (3)
- Essential Learning - History (3)
- MUSL 137 - Voice Lessons (1)
- THEA 116 - Music Theatre Workshop (1)
- THEA 156 - Acting II: Contemporary Scenework (3)
- DANC - Tap/Jazz/Ballet (2)
- Performance Option (1)

#### Sophomore Year, Fall Semester: 15 credits
- Essential Learning - Social and Behavioral Sciences (3)
- MATH 110 - College Mathematics (3) or higher
- MUSL 237 - Voice Lessons (1)
- THEA 253 - Acting III: Stage Movement (3)
- THEA 255 - Music Theatre Techniques (3)
- DANC - Tap/Jazz/Ballet (2)

#### Sophomore Year, Spring Semester: 16 credits
- Essential Learning - Social and Behavioral Sciences (3)
- Essential Learning - Natural Science with Lab (4)
- KINE 100 - Health and Wellness (1)
- MUSL 237 - Voice Lessons (1)
- THEA 216 - Music Theatre Workshop (1)
- THEA 341 - Music Theatre History and Literature (3)
- Performance Option (1)
- DANC - Tap/Jazz/Ballet (2)

#### Junior Year, Fall Semester: 15 credits
- Foundation Course - Foreign Language (3)
- THEA 253 - Acting IV: Stage Movement (3)
- THEA 142 - Make-Up (3)
- MUSL 337 - Voice Lessons (1)
- THEA 355 - Music Theatre Repertoire (3)
- DANC - Tap/Jazz/Ballet (2)

#### Junior Year, Spring Semester: 16 credits
- Essential Learning - Natural Science (3)
- ESSL 290 - Maverick Milestone (3)
- ESSL 200 - Essential Speech (1)
- Essential Learning - Humanities (3)
- Music Theatre Support Course (2)
- DANC - Tap/Jazz/Ballet (2)
- MUSL 337 - Voice Lessons (1)
- THEA 316 - Music Theatre Workshop (1)
Senior Year, Fall Semester: 13 credits
- Essential Learning - Fine Arts (3)
- MUSL 437 - Voice Lessons (1)
- THEA 401 - Career Preparation (3)
- General Electives (6)

Senior Year, Spring Semester: 16 credits
- KINA Activity (1)
- THEA 494 - Performance Seminar (Capstone) (3)
- THEA 416 - Music Theatre Workshop (1)
- Music Theatre Support Course (2)
- MUSL 437 - Voice Lessons (1)
- General Electives (7)
Program Modification

Communication Studies: M251

Degree Type: Minor

Revision to program sheet: Yes ☑ No ☐

Description of modification:

Program Sheet Change:
- Updating the program overview
- SPCH 112 (Voice and Diction) to SPCH 112 (Acting III: Voice and Diction)

Justification:
- Better articulate degree characteristics
- Reflect course name change.

Revision to SLOs: Yes ☑ No ☐

Other changes: Yes ☑ No ☐

Discussions with affected departments:

na

Proposed by: Jill Van Brussel

Director of Teacher Education Signature:

Expected Implementation: Fall 2019
About This Minor...

The communication studies minor offers a broad range of courses focusing on human communication behaviors and is designed to complement any major. The coursework is designed to improve oral message sending and relational communication skills.

In a global survey of industries, companies, and public organizations, communication skills ranked FIRST among the personal qualities of college graduates sought by employers. Enhance your résumé — a communication studies minor gives you communication credibility to open many doors.

Enhance your interpersonal relationships, gain valuable conflict resolution and leadership skills, win arguments, discover the power of persuasion, speak out publicly, use nonverbal and visual communication, and be able to do it all in an increasingly connected, diverse global society.

The Communication Studies minor offers a range of courses focusing on a wide variety of communication aspects and is an excellent complement to any major. This minor will enhance your resume and open up many employment opportunities. In a survey of 480 companies and public organizations, communication skills ranked FIRST among the personal qualities of college graduates sought by employers. Presenting and persuading, logic and listening, understanding and relating; through diverse real life applications, this minor is one that will truly make a positive difference in your personal and professional lives.

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a minor. Meeting with an academic advisor is essential in planning courses and developing a suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended minor.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a minor. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head for the minor. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process

A minor cannot be awarded by itself. It must be combined with a baccalaureate degree outside the major field of study. Students should follow the graduation process outlined for the baccalaureate degree and list their majors and minors on the “Intent to Graduate” form.

If a student’s petition for graduation is denied, it will be her/his responsibility to consult the Registrar’s Office regarding next steps.
INSTITUTIONAL MINOR REQUIREMENTS

The following institutional requirements apply to all CMU minors. Specific programs may have different requirements that must be met in addition to institutional requirements.

- A minor consists of 15-24 semester hours. There may be prerequisites required for the minor which will increase the total number of credit hours for a student who has not already taken those prerequisites.
- Courses taken to satisfy Essential Learning, major requirements, or electives can be counted toward the minor if applicable.
- At least 33 percent of the credit hours required for the minor must be in courses numbered 300 or above.
- At least 25 percent of the classes must be taken at CMU.
- 2.00 cumulative GPA or higher for the courses used for the minor.
- A minor is not a degree by itself and must be earned at the same time as a baccalaureate degree.
- A minor must be outside the major field of study.
- A student may earn up to five minors with any baccalaureate degree at CMU.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements sheet you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC MINOR REQUIREMENTS

- 18 semester hours for the Minor in Communication Studies

REQUIRED COURSES FOR THE COMMUNICATION STUDIES MINOR (18 semester hours)

- SPCH 101 - Interpersonal Communication (3)
- SPCH 102 - Speechmaking (3)
- SPCH 203 - Persuasions (3)
- SPCH 308 - Argumentation & Debate (3)
- Choose two courses from the following (6):
  - SPCH 112 – Acting III: Voice & Diction
  - SPCH 303 - Nonverbal Communication (3)
  - SPCH 304 - Communication & Conflict (3)
  - SPCH 305 - Communication: Culture, Diversity & Gender (3)
  - SPCH 306 - Communication & Leadership (3)
  - THEA 403 - Methods of Teaching Drama & Speech (3)

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