

Undergraduate Curriculum Committee
Meeting Minutes
January 26, 2017
3:30 pm, UC 222

Members Present: Diana Bailey, Lisa Driskell, Eric Elliott, Keith Fritz, Geoffrey Gurka, Jennifer Hancock, Glenn Hoff, Eliot Jennings, Scott Kessler, Jennifer LaBombard-Daniels, and Jill Van Brussel

Members Absent: Sean Flanigan

Ex-officio members present: Kurt Haas (AVPAA), Rose Petralia (Library), and Holly Teal (Registrar).

Guests: Maggie Bodyfelt (Registrar's Office); Don Carpenter (Business); Debra Bailey, and Patti Ward via telephone (Health Sciences), Phil Gustafson (Computer Science, Mathematics and Statistics); Russ Walker (Physical and Environmental Sciences).

Recording Secretary: Jessie Barnett

Chair Kessler called the meeting to order at 3:34

I. Announcements

- A) Meeting minutes from 11/10/2016 on Faculty Senate's 12/1/16 Consent Agenda
- B) Meeting minutes from 12/8/2017 sent to Faculty Senate – expected to be on the 2/2/17 Consent Agenda
- C) Proposals expected for the February agenda were briefly discussed.

II. Curriculum Proposals

Summary of committee actions on curriculum proposals begins on pg. 2.
Further details of proposals begin on pg.14.

III. Information Items

IV. New Business

With no additional business, the meeting adjourned at 4:44.

Respectfully submitted,
Jessie Barnett
Recording Secretary

Summary of UCC Actions on Curriculum Proposals

1/26/2017

Proposal	Committee Action	Members (motion/second)	Effective Date
1 Program Addition: AA Liberal Arts, University Studies No concerns.	Approved	LaBombard- Daniesl, Gurka	Fall 2017
2 Course Addition: ARTA 222 Principles of Digital Photography No concerns.	Approved	Elliott, Van Brussel	Fall 2017
3 Course Addition: ARTA 322 Intermediate Photography No concerns.	Approved	Elliott, Van Brussel	Fall 2017
4 Course Addition: ARTA 422 Advanced Photography & Studio Lighting No concerns.	Approved	Elliott, Van Brussel	Fall 2017
5 Course Addition: ARTG 373 Screen Printing for Graphic Design No concerns.	Approved	Elliott, Van Brussel	Fall 2017
6 Course Addition: ARTG 421 Contemporary Letterpress No concerns.	Approved	Elliott, Van Brussel	Fall 2017
7 Course Addition: ARTS 366 Painting 2: Observational Painting Contact hours will be corrected to 1 hour "lecture" and 4 hours "other". Academic engagement minutes will be corrected to 3750 and student preparation minutes will be corrected to 3000.	Approved contingent upon corrections	Elliott, Van Brussel	Fall 2017
8 Course Modification: ARTA 424 Animation, Film & Motion Design Studio I No concerns.	Approved	Hancock, Bailey	Fall 2017
9 Course Modification: ARTA 425 Animation, Film & Motion Design Studio II No concerns.	Approved	Hancock, Bailey	Fall 2017
10 Course Modification: ARTS 354 Figure Drawing and Modeling No concerns.	Approved	Hancock, Bailey	Fall 2017

Proposal	Committee Action	Members (motion/second)	Effective Date
11 Course Modification: ARTS 365 Painting 2: Methods and Materials The course modification proposal was corrected to include a new title for the course in addition to changed prerequisites. The title was approved as "Painting 2: Into Abstraction" with the understanding that the department head has been informed and approves the new name.	Approved contingent upon corrections	Hancock, Bailey	Fall 2017
12 Course Modification: ARTS 391 Painting Workshop 1 No concerns.	Approved	Hancock, Bailey	Fall 2017
13 Course Modification: ARTT 270 Sculpture I No concerns.	Approved	Hancock, Bailey	Fall 2017
14 Program Modification: BFA Animation, Film and Motion Design: 3279 No concerns.	Approved	LaBombard- Daniels, Elliott	Fall 2017
15 Program Modification: BFA Art-Studio Art: 3272 No concerns.	Approved	LaBombard- Daniels, Elliott	Fall 2017
16 Program Modification: Minor Studio Art: M200 No concerns.	Approved	LaBombard- Daniels, Elliott	Fall 2017
17 Course Addition: CISB 309 Enterprise Systems Dr. Don Carpenter, Professor of Computer Information Systems, and Dr. Gurka provided an overview of Department of Business proposals. No concerns with the proposals were raised.	Approved	Gurka, Jennings	Fall 2017
18 Course Modification: CISB 310 Enterprise Architecture No concerns.	Approved	Jennings, Gurka	Fall 2017
19 Course Modification: CISB 442 Systems Analysis and Design No concerns.	Approved	Jennings, Gurka	Fall 2017
20 Program Modification: BAS Computer Information Systems: 3167 No concerns.	Approved	Jennings, Gurka	Fall 2017
21 Program Modification: BBA Business Administration- Business Economics: 3122 No concerns.	Approved	Jennings, Gurka	Fall 2017

Proposal	Committee Action	Members (motion/second)	Effective Date
22 Program Modification: BBA Business Administration- Emerging Markets: 3172 No concerns.	Approved	Jennings, Gurka	Fall 2017
23 Program Modification: BBA Business Administration- Energy Management/Landman: 3118 No concerns.	Approved	Jennings, Gurka	Fall 2017
24 Program Modification: BBA Business Administration- Entrepreneurship: 3119 No concerns.	Approved	Jennings, Gurka	Fall 2017
25 Program Modification: BBA Business Administration- Finance: 3125 No concerns.	Approved	Jennings, Gurka	Fall 2017
26 Program Modification: BBA Business Administration- Hospitality Management: 3171 No concerns.	Approved	Jennings, Gurka	Fall 2017
27 Program Modification: BBA Business Administration- Human Resource Management: 3128 No concerns.	Approved	Jennings, Gurka	Fall 2017
28 Program Modification: BBA Business Administration- Information Systems: 3123 No concerns.	Approved	Jennings, Gurka	Fall 2017
29 Program Modification: BBA Business Administration- Insurance: 3169 No concerns.	Approved	Jennings, Gurka	Fall 2017
30 Program Modification: BBA Business Administration- Management: 3126 No concerns.	Approved	Jennings, Gurka	Fall 2017
31 Program Modification: BBA Business Administration- Managerial Informatics: 3168 No concerns.	Approved	Jennings, Gurka	Fall 2017
32 Program Modification: BBA Business Administration- Marketing: 3127 No concerns.	Approved	Jennings, Gurka	Fall 2017
33 Program Modification: BS Computer Information Systems: 3165 No concerns.	Approved	Jennings, Gurka	Fall 2017

Proposal	Committee Action	Members (motion/second)	Effective Date
34 Program Modification: Minor Accounting: M135 No concerns.	Approved	Jennings, Gurka	Fall 2017
35 Program Modification: Minor Business: M130 No concerns.	Approved	Jennings, Gurka	Fall 2017
36 Program Modification: Minor Computer Information Systems: M751 No concerns.	Approved	Jennings, Gurka	Fall 2017
37 Program Addition: BS Mathematics - Applied Mathematics Dr. Phil Gustafson, Professor of Mathematics provided an overview of the proposal to add the Applied Mathematics concentration to the Mathematics major. No concerns were raised.	Approved	Bailey, Elliott	Fall 2017
38 Course Addition: MATH 150 Topics and Careers in Mathematics No concerns.	Approved	Hancock, Elliott	Fall 2017
39 Course Addition: MATH 366 Methods of Applied Mathematics II No concerns.	Approved	Hancock, Elliott	Fall 2017
40 Course Addition: MATH 466 Methods of Applied Mathematics III No concerns.	Approved	Hancock, Elliott	Fall 2017
41 Course Modification: MATH 225 Computational Linear Algebra No concerns.	Approved	Gurka, Bailey	Fall 2017
42 Course Modification: MATH 325 Linear Algebra I No concerns.	Approved	Gurka, Bailey	Fall 2017
43 Course Modification: MATH 460 Linear Algebra II No concerns.	Approved	Gurka, Bailey	Fall 2018
44 Course Modification: STAT 425 Design and Analysis of Experiments No concerns.	Approved	Gurka, Bailey	Fall 2017

Proposal	Committee Action	Members (motion/second)	Effective Date
45 Program Modification: BS Mathematics-Mathematics: 3424 It was clarified that the Core Requirements of the three existing concentrations within the Mathematics major have been updated to allow for a shared Core that will also work for the new Applied Mathematics concentration.	Approved	Hancock, Bailey	Fall 2017
46 Program Modification: BS Mathematics-Secondary Education: 3430 See agenda item 45.	Approved	Hancock, Bailey	Fall 2017
47 Program Modification: BS Mathematics-Statistics: 3434 See agenda item 45.	Approved	Hancock, Bailey	Fall 2017
48 Program Modification: Minor Statistics: M465 No concerns.	Approved	Hancock, Bailey	Fall 2017
49 Program Addition: BS Radiologic Sciences Dr. Patti Ward provided an overview of the BS, Radiologic Sciences program addition and accompanying course changes. In updating the program offerings, the current AAS, Radiologic Technology will be closed and the name of the current BAS will be changed from Radiologic Technology to Radiologic Sciences. Dr. Debra Baily, Director of Health Sciences, requested that this new program be added to the "Professional, Technical and Other (PTO) Category" in the Curriculum Policies and Procedures Manual.	Approved	Elliott, Van Brussel	Fall 2017
50 Course Addition: RADS 320 Introduction to Radiologic Technology and Patient Care No concerns.	Approved	Longest, Elliott	Fall 2017
51 Course Addition: RADS 320L Introduction to Radiologic Technology and Patient Care Lab No concerns.	Approved	Longest, Elliott	Fall 2017
52 Course Addition: RADS 321 Radiographic Anatomy and Positioning I No concerns.	Approved	Longest, Elliott	Fall 2017
53 Course Addition: RADS 321L Radiographic Anatomy and Positioning I No concerns.	Approved	Longest, Elliott	Fall 2017
54 Course Addition: RADS 322 Principles of Radiographic Exposure No concerns.	Approved	Longest, Elliott	Fall 2017
55 Course Addition: RADS 322 L Principles of Radiographic Exposure Lab No concerns.	Approved	Longest, Elliott	Fall 2017

Proposal	Committee Action	Members (motion/second)	Effective Date
56 Course Addition: RADS 323 Digital Imaging No concerns.	Approved	Longest, Elliott	Fall 2017
57 Course Addition: RADS 329 Radiographic Clinical Experience I It was clarified that the academic engagement minutes and student preparation minutes exceed the CDHE minimum requirements in order to meet accreditation requirements. No additional questions.	Approved	Longest, Elliott	Fall 2017
58 Course Addition: RADS 331 Radiographic Anatomy and Positioning II No concerns.	Approved	Longest, Elliott	Fall 2017
59 Course Addition: RADS 331L Radiographic Anatomy and Positioning II Lab No concerns.	Approved	Longest, Elliott	Fall 2017
60 Course Addition: RADS 332 Specialized Imaging No concerns.	Approved	Longest, Elliott	Fall 2017
61 Course Addition: RADS 333 Imaging Equipment and Quality Assurance No concerns.	Approved	Longest, Elliott	Fall 2017
62 Course Addition: RADS 333L Imaging Equipment and Quality Assurance Lab No concerns.	Approved	Longest, Elliott	Fall 2017
63 Course Addition: RADS 334 Image Analysis I No concerns.	Approved	Longest, Elliott	Fall 2017
64 Course Addition: RADS 335 Radiation Biology and Protection No concerns.	Approved	Longest, Elliott	Fall 2017
65 Course Addition: RADS 339 Radiographic Clinical Experience II No concerns.	Approved	Longest, Elliott	Fall 2017
66 Course Addition: RADS 354 Image Analysis II No concerns.	Approved	Longest, Elliott	Fall 2017
67 Course Addition: RADS 449 Radiographic Clinical Experience III No concerns.	Approved	Longest, Elliott	Fall 2017

Proposal	Committee Action	Members (motion/second)	Effective Date
68 Course Addition: RADS 451 Imaging Pathology No concerns.	Approved	Longest, Elliott	Fall 2017
69 Course Addition: RADS 452 Sectional Anatomy No concerns.	Approved	Longest, Elliott	Fall 2017
70 Course Addition: RADS 453 Advanced Patient Care No concerns.	Approved	Longest, Elliott	Fall 2017
71 Course Addition: RADS 459 Radiographic Clinical Experience IV No concerns.	Approved	Longest, Elliott	Fall 2017
72 Course Addition: RADS 461 Principles of Computed Tomography No concerns.	Approved	Longest, Elliott	Fall 2017
73 Course Addition: RADS 462 Leadership and Management No concerns.	Approved	Longest, Elliott	Fall 2017
74 Course Addition: RADS 463 Information Literacy in Radiologic Sciences No concerns.	Approved	Longest, Elliott	Fall 2017
75 Course Addition: RADS 464 Senior Capstone No concerns.	Approved	Longest, Elliott	Fall 2017
76 Course Addition: RADS 469 Radiographic Clinical Experience V No concerns.	Approved	Longest, Elliott	Fall 2017
77 Course Deletion: RTEC 114 Radiographic Clinical Experience I The program deletion for the AAS, Radiologic Technology needs to be submitted for these course deletions to be approved. The department plans to submit the additional proposal at the next meeting.	Conditionally Approved	Fritz, Elliott	Fall 2017
78 Course Deletion: RTEC 120 Introduction to Radiologic Technology and Patient Care See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017
79 Course Deletion: RTEC 121 Radiographic Anatomy and Positioning I See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017

Proposal	Committee Action	Members (motion/second)	Effective Date
80 Course Deletion: RTEC 121L Radiographic Anatomy and Positioning I Lab See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017
81 Course Deletion: RTEC 122 Principles of Radiographic Exposure See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017
82 Course Deletion: RTEC 122L Principles of Radiographic Exposure See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017
83 Course Deletion: RTEC 123 Digital Imaging See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2018
84 Course Deletion: RTEC 124 Radiographic Clinical Experience II See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017
85 Course Deletion: RTEC 131 Radiographic Anatomy and Positioning II See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017
86 Course Deletion: RTEC 131L Radiographic Anatomy and Positioning II Lab See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017
87 Course Deletion: RTEC 133 Imaging Equipment See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017
88 Course Deletion: RTEC 133L Imaging Equipment Lab See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017
89 Course Deletion: RTEC 135 Radiation Biology and Protection See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2017
90 Course Deletion: RTEC 214 Radiographic Clinical Experience III See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2018
91 Course Deletion: RTEC 224 Radiographic Clinical Experience IV See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2018

Proposal	Committee Action	Members (motion/second)	Effective Date
92 Course Deletion: RTEC 234 Radiographic Clinical Experience V See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2018
93 Course Deletion: RTEC 251 Radiographic Pathology See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2018
94 Course Deletion: RTEC 255 Radiographic Assessment I See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2018
95 Course Deletion: RTEC 261 Radiographic Review See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2018
96 Course Deletion: RTEC 265 Radiographic Assessment II See discussion of agenda item 77.	Conditionally Approved	Fritz, Elliott	Fall 2018
97 Course Modification: NURS 107L Foundations of Nursing Laboratory Typos will be corrected in the justification.	Approved contingent upon corrections	Elliott, Hancock	Fall 2017
98 Course Modification: CHEM 321 Physical Chemistry I Dr. Russ Walker was available to answer questions for the Physical and Environmental department proposals.	Approved	Gurka, Elliott	Fall 2017
99 Course Modification: CHEM 322 Physical Chemistry II No concerns.	Approved	Gurka, Elliott	Fall 2017
100 Course Modification: ENVS 221L Science and Technology of Pollution Control Lab It was clarified that the "mastery of high school algebra" cannot be enforced by the Registrar's Office as a course prerequisite but that the language can remain in the prerequisite field as the request of the department.	Approved	LaBombard-Daniels, Elliott	Fall 2017
101 Course Modification: ENVS 340 Applied Atmospheric Science No concerns.	Approved	LaBombard-Daniels, Elliott	Fall 2017
102 Course Modification: ENVS 420 Pollution Monitoring and Investigation No concerns.	Approved	LaBombard-Daniels, Elliott	Fall 2017

Proposal	Committee Action	Members (motion/second)	Effective Date
103 Course Modification: ENVS 420L Pollution Monitoring and Investigation Laboratory No concerns.	Approved	LaBombard-Daniels, Elliott	Fall 2017
104 Program Modification: BS Environmental Science and Technology: 3443 Requirement on the program sheet will be clarified withing the new format to read: "One of the following courses: -MATH 146 ... -MATH 151 ... -ENVS 475 ..."	Approved contingent upon corrections	Hancock, Elliott	Fall 2017
105 Course Deletion: OFAD 101 Office Bookkeeping The deletions of the OFAD courses and Office Administration programs meet the condition of approval of the ABUS courses and Applied Business programs that were proposed at the 12/08/16 UCC meeting.	Approved	Driskell, Fritz	Fall 2017
106 Course Deletion: OFAD 105 Ten Key See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017
107 Course Deletion: OFAD 120 Internet and social networking See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017
108 Course Deletion: OFAD 125 Multimedia and web editing See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017
109 Course Deletion: OFAD 147 Introduction to Personal Computer See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2018
110 Course Deletion: OFAD 153 Word Processing I See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017
111 Course Deletion: OFAD 201 Office procedures See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017
112 Course Deletion: OFAD 202 Records Management See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017
113 Course Deletion: OFAD 206 Computerized Bookkeeping See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017

Proposal	Committee Action	Members (motion/second)	Effective Date
114 Course Deletion: OFAD 208 Spreadsheets See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017
115 Course Deletion: OFAD 221 Transcription Machines See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017
116 Course Deletion: OFAD 267 Presentation, Publishing, and Desk Top Management See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017
117 Course Deletion: OFAD 269 Complete PC Database See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2017
118 Course Deletion: OFAD 291 Service Learning See discussion for agenda item 105.	Approved	Driskell, Fritz	Fall 2019
119 Program Deletion: AA Liberal Arts-Admin Office Tech: 2334 Deletion See discussion for agenda item 105.	Approved	Hancock, Hoff	Fall 2017
120 Program Deletion: AAS Admin Office Tech-Administrative Professional: 1395 Deletion See discussion for agenda item 105.	Approved	Hancock, Hoff	Fall 2017
121 Program Deletion: Tech Cert Admin Office Techn-General Office Administration: 1356 Deletion See discussion for agenda item 105.	Approved	Hancock, Hoff	Fall 2017
122 Program Addition: AAS Visual Communications: Immersive Design Technology [Per Chair Glenn Hoff of the WCCC Curriculum Committee, this proposal is being postponed/canceled.]	[None - Proposal , Withdrawn]		
123 Program Addition: Technical Cert Visual Communications: Immersive Media Technology [Per Chair Glenn Hoff of the WCCC Curriculum Committee, this proposal is being postponed/canceled.]	[None - Proposal , Withdrawn]		
124 Course Addition: MGDI 100 Virtual Reality Production I [Per Chair Glenn Hoff of the WCCC Curriculum Committee, this proposal is being postponed/canceled.]	[None - Proposal , Withdrawn]		
125 Course Addition: MGDI 200 Virtual Reality Production II [Per Chair Glenn Hoff of the WCCC Curriculum Committee, this proposal is being postponed/canceled.]	[None - Proposal , Withdrawn]		

Proposal	Committee Action Members (motion/second)	Effective Date
126 Course Addition: MGDI 270 Virtual Reality Production III [Per Chair Glenn Hoff of the WCCC Curriculum Committee, this proposal is being postponed/canceled.]	[None - Proposal , Withdrawn]	
127 Course Addition: MGDI 274 Directing Virtual Reality [Per Chair Glenn Hoff of the WCCC Curriculum Committee, this proposal is being postponed/canceled.]	[None - Proposal , Withdrawn]	
128 Course Addition: MGDI 275 Producing Indie Virtual Reality [Per Chair Glenn Hoff of the WCCC Curriculum Committee, this proposal is being postponed/canceled.]	[None - Proposal , Withdrawn]	
129 Course Addition: MGDI 285 Virtual Reality Capstone [Per Chair Glenn Hoff of the WCCC Curriculum Committee, this proposal is being postponed/canceled.]	[None - Proposal , Withdrawn]	

Curriculum Committee Proposal Summary

1/26/2017

Department: Academic Affairs

Program Additions

Liberal Arts, University Studies

Degree Type: AA

Abbreviated Name: University Studies

Proposed by: Kurt Haas

Director of Teacher Education Signature: N/A

Expected Implementation: Fall 2017

Department: Art and Design

Course Additions

ARTA 222 Credit Hours 3

Course Title: Principles of Digital Photography

Abbreviated Title: Prin of Digital Photo

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

Type of Instructional Activity: Hybrid Courses

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 2017

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, Animation, Film and Motion Design: 3279

Course is a requirement for a new program:

Animation, Film and Motion Design is being modified to become Animation, Film, Photography and Motion Design

Overlapping content with present courses offered on campus: Yes No

Overlapping content with ARTS 110 Digital Photography? ARTA 222 is a required course for Animation, Film & Motion Design only. ARTS 110 is not required in any major and is listed under the Studio Art major. While both classes are introductory photography classes, they have very different focuses and cover different materials.

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:

Photography is being added to the modification of the Animation, Film, Photography and Motion Design BFA. This will be the sophomore level course in photography.

Additional note added after executive subcommittee review:

Is there overlapping content with ARTS 110 Digital Photography? ARTA 222 is a required course for Animation, Film & Motion Design only. ARTS 110 is not required in any major and is listed under the Studio Art major. While both classes are introductory photography classes, they have very different focuses and cover different materials.

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

Course Additions

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. Demonstrate understanding of the capabilities of a Digital Single Lens Reflex Camera
2. Use aperture to creatively control depth of field
3. Use shutter speed creatively to control blur and freeze
4. Compose an interesting and well-designed image
5. Process images in Photoshop to the point of being able to print successfully
6. Demonstrate organized file management

Discussions with affected departments:

N/A

Proposed by: Carolyn Quinn-Hensley

Expected Implementation: Fall 2017

Course Additions

ARTA 322

Credit Hours 3

Course Title: Intermediate Photography

Abbreviated Title: Intermediate Photo

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

Type of Instructional Activity: Hybrid Courses

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 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

ARTE 101 Two Dimensional Design; ARTA 222 Principles of Digital Photography

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, Animation, Film and Motion Design: 3279

Course is a requirement for a new program:

Animation, Film and Motion Design is being modified to become Animation, Film, Photography and Motion Design

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:

Discovery of vision and the art of seeing through the lens of a camera.

Justification:

Photography is being added to the program modification for Animation, Film, Photography and Motion Design BFA. This will be the junior level course in photography.

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. Compose images with an artistic eye.
2. Apply the elements of design that influence a successful image.
3. Exhibit the importance of the still image in the professional environment.

Discussions with affected departments:

N/A

Course Additions

Course Additions

ARTA 422

Credit Hours 3

Course Title: Advanced Photography & Studio Lighting

Abbreviated Title: Adv Photo & Studio Light

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

Type of Instructional Activity: Hybrid Courses

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 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

ARTE 101 Two Dimensional Design; ARTA 222 Principles of Digital Photography; ARTA 322 Intermediate Photography

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, Animation, Film and Motion Design: 3279

Course is a requirement for a new program:

Animation, Film and Motion Design is being modified to become Animation, Film, Photography and Motion Design

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 light and the development of a studio lighting portfolio.

Justification:

Photography is being added to the program modification for Animation, Film, Photography and Motion Design BFA. This will be the senior level course in photography.

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. Successfully light subjects for the creation of an image that meets objectives.
2. Use available light in creative ways to light a subject.
3. Photograph successfully in low light situations.
4. Construct a body of work that shows comprehension of the study of light.

Discussions with affected departments:

N/A

Course Additions

Course Additions

ARTG 373

Credit Hours 3

Course Title: Screen Printing for Graphic Design

Abbreviated Title: Screen Printing for GD

Contact hours per week: Lecture Lab Field Studio 6 Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 4500 Student preparation minutes: 2250

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

Intended semester to offer course 1st time: Fall 2017

Number of times course may be taken for credit: 2

Essential Learning Course: Yes No

Prerequisites: Yes No

ARTG 221

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:

Introduce concepts and techniques of screen printing within Graphic Design and Illustration. Become familiar with industry tools, equipment and processes.

Justification:

Screen printing, in the Graphic Design program, was first offered in the Fall of 2014. The Art and Design Department has offered screen printing to design students in the form of topics courses as well as embedded within curriculum. The response is continually strong and the student's portfolios are reflecting the integration. It is imperative that Graphic Design majors graduate with a portfolio that demonstrates relevant industry knowledge and production methods.

Topical course outline:

1. The technical process of screen printing
2. Workflow in screen print lab and studio
3. Creating images with graphic design software and hand rendered techniques
4. Print on variety of medium, paper, metal, wood, etc.
5. Market artwork through social media and online outlets

Student Learning Outcomes:

1. Produce screen prints with water-based inks
2. Develop complex images using layering techniques
3. Create images that extend beyond formal and technical elements.
4. Discuss how to critically analyze conceptual development.
5. Apply Screen Printing in their own work.

Course Additions

Proposed by: Eli Marco Hall

Expected Implementation: Fall 2017

Course Additions

ARTG 421

Credit Hours 3

Course Title: Contemporary Letterpress

Abbreviated Title: Letterpress

Contact hours per week: Lecture Lab Field Studio 6 Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 4500 Student preparation minutes: 2250

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

Intended semester to offer course 1st time: Fall 2017

Number of times course may be taken for credit: 2

Essential Learning Course: Yes No

Prerequisites: Yes No

ARTG 221

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:

Approaches to traditional and contemporary letterpress. Materials will be introduced and technique developed for practical use.

Justification:

Letterpress in the contemporary educational environment is a foundational approach to teaching typography. Working with letterforms is one of the most valued skills in the Graphic Design industry. All terminology and functionality of working with type on the computer comes directly from traditional letterpress. Students who are exposed to the tactile process of movable type have a better understanding of how to work with typography in the digital space. Having a superior understanding of typography will give the CMU Graphic Design majors a competitive edge.

Topical course outline:

1. Introduction of letterpress and typography terminology
2. The traditional printing process
3. Contemporary implementation of letterpress
4. Print glyphs from the 3D printer
5. Print glyphs from the CNC router
6. Produce on a variety of papers
7. Proper press shop workflow and procedures

Student Learning Outcomes:

1. Demonstrate proper letterpress shop workflow
2. Demonstrate understanding of typographic terms
3. Identify contemporary uses of letterpress
4. Combine contemporary and traditional methods

Course Additions

5. Utilize letterpress as a communication tool
6. Shows proficiency with movable type and implements

Proposed by: Eli Marco Hall

Expected Implementation: Fall 2017

Course Additions

ARTS 366

Credit Hours 3

Course Title: Painting 2: Observational Painting

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

Type of Instructional Activity: Lecture

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 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

ARTS 291

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

ARTS 364 will be stacked with ARTS 365. Both classes will be Painting 2 classes covering different topics meant to be bridge classes between foundation classes and advance classes, but exploring different focuses.

Additional faculty FTE required: Yes No

Additional equipment required: Yes No

Additional lab facilities required: Yes No

Course description for catalog:

Further exploration of observational painting through various techniques, materials, and processes inherent to contemporary observational painting. This course builds on the foundation of observational painting in ARTS 291 allowing students to further develop their observational painting skills.

Justification:

ARTS 291, the prerequisite to ARTS 366, is an introduction to the language of painting through observational painting, and ARTS 366 will give students who wish to further develop their skills and knowledge of observational painting a class to do that. This course will be stacked with ARTS 365 Painting 2: Exploring Abstraction, both giving students an opportunity to learn more about different painting styles and techniques before going on to developing their own personal body of work.

Topical course outline:

1. Explore observational painting within historical and contemporary painting
2. Exploration of different processes, materials, techniques, surfaces, and tools
3. A further exploration of color
4. A more advanced exploration of composition and spatial concepts
5. A critical analysis of different observational painting practices throughout history
6. Have students become aware of and make independent choices concerning their own personal style and artistic direction.

Student Learning Outcomes:

1. Demonstrate a proficiency with various painting techniques, tools, and materials as they relate to observational painting.
2. Demonstrate a further understanding of color theory and color mixing.

Course Additions

3. Develop a more mature understanding of composition, the formal elements of art, and the vocabulary of art and painting
4. Communicate clearly regarding the critical analysis of observational painting both historical and contemporary
5. Develop practical skills for entry into a professional career in painting
6. Start to develop a body of work through self-directed research

Discussions with affected departments:

NA

Proposed by: Eric Elliott

Expected Implementation: Fall 2017

Course Modifications

ARTA 424

Intended semester to offer modified course for the 1st time: Fall 2017

	Current	Proposed
Course Prefix:	ARTA	
Course No.:	424	
Credit Hours:	3	
Course Title:	Animation, Film & Motion Design Studio I	Animation, Film, Photography & Motion Design Studio I
Abbreviated Title:	AF&MD Studio I	AFP&MD Studio I
Times for Credit:	1	1
Prerequisites:		

Current: ARTA 323, ARTA 324, ARTA 325, ARTA 326, ARTA 327

Proposed: ARTA 322, ARTA 323, ARTA 324, ARTA 325, ARTA 326, ARTA 327

Description for catalog:

Current: Exploration of advanced individual projects in animation, film, and motion design. Students are encouraged to focus on advanced individual projects based on perfecting their personal interests and focusing on career goals.

Proposed: Exploration of advanced individual projects in animation, film, photography and motion design. Students are encouraged to focus on advanced individual projects based on perfecting their personal interests and focusing on career goals.

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 and Motion Design: 3279

Course is a requirement for a new program:

Animation, Film and Motion Design is being modified to become Animation, Film, Photography and Motion Design

Justification:

The course title is changing to reflect that Photography is being added to the Animation, Film and Motion Design program to become Animation, Film, Photography and Motion Design. The prerequisites are changing to reflect the addition of ARTA 322 to the junior-level coursework students should complete before enrolling in 400-level courses.

Topical course outline, current:

1. Advanced project in animation, film and/or motion design
2. Advanced technologies
3. Advanced sound and audio editing
4. Advanced storytelling
5. Advanced storyboard
6. Portfolio and demo reel
7. Career options

Topical course outline, proposed:

1. Advanced project in animation, film, photography and/or motion design
2. Advanced digital technologies
3. Advanced sound and audio editing
4. Advanced studio lighting

Course Modifications

5. Advanced storytelling
6. Advanced storyboard
7. Portfolio and demo reel
8. Career options

Student Learning Outcomes, current:

1. Produce advanced animation, film or motion design projects
2. Develop advanced storytelling and storyboarding
3. Exhibit skills in variety of advanced animation, film and motion design software
4. Exhibit final project during annual AF&MD Festival
5. Enter work in national or international animation festivals

Student Learning Outcomes, proposed:

1. Produce advanced animation, film, photography or motion design projects
2. Develop advanced storytelling and storyboarding
3. Exhibit skills in variety of advanced animation, film, photography and motion design software
4. Apply advanced studio lighting to digital photography
5. Exhibit final project during annual AFP&MD Festival
6. Enter work in national or international exhibits and/or festivals

Discussions with affected departments:

N/A

Proposed by: Carolyn Quinn-Hensley

Expected Implementation: Fall 2017

Course Modifications

ARTA 425

Intended semester to offer modified course for the 1st time: Spring 2018

	Current	Proposed
Course Prefix:	ARTA	
Course No.:	425	
Credit Hours:	3	
Course Title:	Animation, Film & Motion Design Studio II	Animation, Film, Photography & Motion Design Studio II
Abbreviated Title:	AF&MD Studio II	AFP&MD Studio II
Times for Credit:	1	1

Description for catalog:

Current: Continuation of ARTA 424. Students submit proposals for individual projects focusing on singular or combined work in animation, film, and motion design. Emphasis is placed on the professional presentation of finished projects. Prerequisite: ARTA 424.

Proposed: Continuation of ARTA 424. Students submit proposals for individual projects focusing on singular or combined work in animation, film, photography and motion design. Emphasis is placed on the professional presentation of finished projects. Prerequisite: ARTA 424.

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 and Motion Design: 3279

Course is a requirement for a new program:

Animation, Film and Motion Design is being modified to become Animation, Film, Photography and Motion Design

Justification:

Photography is being added to the BFA in Animation, Film and Motion Design to become Animation, Film, Photography and Motion Design

Topical course outline, current:

1. Advanced project in animation, film and/or motion design
2. Advanced technology
3. Advanced sound and audio
4. Advanced storytelling
5. Storyboarding as finished art form
6. Individual and personal production issues

Topical course outline, proposed:

11. Advanced project in animation, film, photography and/or motion design
2. Advanced digital technology
3. Advanced sound and audio
4. Advanced studio lighting
4. Advanced storytelling
5. Storyboarding as finished art form
6. Individual and personal production issues

Student Learning Outcomes, current:

1. Produce advanced animation, film or motion design project
2. Create advanced storyboards

Course Modifications

3. Exhibit final project during annual AF&MD Festival
4. Enter work in national or international animation festivals

Student Learning Outcomes, proposed:

1. Produce advanced animation, film, photography or motion design project
2. Create advanced storyboards
3. Exhibit final project during annual AFP&MD Festival
4. Enter work in national or international exhibit and/or animation festivals

Discussions with affected departments:

N/A

Proposed by: Carolyn Quinn-Hensley

Expected Implementation: Fall 2017

Course Modifications

ARTS 354

Intended semester to offer modified course for the 1st time: Fall 2017

	Current	Proposed
Course Prefix:	ARTS	
Course No.:	354	
Credit Hours:	3	
Course Title:	Figure Drawing and Modeling	Intermediate Life Drawing
Times for Credit:	1	2
Prerequisites:		
Current:		
ARTE 102 and ARTS 251		
Proposed:		
ARTS 251		

Description for catalog:

Current:

Human figure as a critical component. Combines 3-D modeling methods with classical drawing approaches developing a deeper understanding of the subtleties of human anatomy. Group and individual critiques are ongoing. Digital documentation of work for portfolios

Proposed:

Continuation of the study of the human figure through an exploration and practice of composition, form, structure, volume, movement, anatomy and drawing processes

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

Change affects program sheet or grad requirements: Yes No

Justification:

ARTS 354 (Intermediate Life Drawing) is a continuation of ARTS 251 (Life Drawing). Life drawing is the foundation of any drawing program because it helps students grasp the concepts of form, space, perspective, proportion, light, shade, and composition. It gives them a structured way of thinking about visual problem solving. Drawing the human body is complicated and requires strong perceptual and technical skills. Through continued study of Intermediate life drawing students will come to understand how to draw a figure and the space it occupies, they can apply this knowledge in broad ways across artistic disciplines whether they incorporate the figure in their work or not. It is an essential element of artistic development and has been a tradition in art schools and universities for centuries. The prerequisite of ARTE 102 (3D Design) is not necessary for students to succeed in ARTS 354 so removing it will alleviate schedule conflicts and increase enrollment for ARTS 354.

Topical course outline, current:

1. Anatomical study
2. Modeling in clay
3. Figure as geometrical shapes

Topical course outline, proposed:

1. Use various techniques to construct drawings of the body
2. Look at skeletal structures to understand anatomy
3. Explore how the gesture captures both movement and position in space
4. Use light and shade to create form and space.
5. Place multiple figures and the space they occupy in drawings.
6. Study historical and contemporary artists and their use of the figure in both painting and drawing.

Student Learning Outcomes, current:

1. Strengthen working understanding of anatomy
2. Model and draw the figure in proportion using multiple techniques

Course Modifications

3. See figure in terms of simple geometry and abstract patterns
4. Render and model the effects of light on form.
5. Explore various construction and deconstruction techniques
6. Apply content, texture and emotion to your work
7. Apply aesthetic judgement to personal style

Student Learning Outcomes, proposed:

1. Organize the drawing of the figure and the space it occupies into successful compositions
2. Demonstrate the use of various drawing media (including color) in their work.
3. Demonstrate the use of structural, calligraphic, expressive and contour lines to express ideas about the figure in their work.
4. Demonstrate the use of light and shade as a tool for creating or negating form and space.
5. Critique and evaluate drawing with regard to subject, intent and content.
6. Demonstrate a strong knowledge of contemporary and historical artists and use of the human body to express ideas in their work.

Proposed by: Alison Harris

Expected Implementation: Fall 2017

Course Modifications

ARTS 365

Intended semester to offer modified course for the 1st time: Fall 2017

Current

Proposed

Course Prefix: ARTS

Course No.: 365

Credit Hours: 3

Course Title: Painting 2: Methods and Materials

Painting 2: Into Abstraction

Times for Credit: 1

1

Prerequisites:

Current: ARTS 291

Proposed: ARTS 151

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

Change affects program sheet or grad requirements: Yes No

Justification:

This modification is changing the Prerequisite for ARTS 365 from ARTS 291 to ARTS 151. ARTS 365 is a class exploring the evolution of observational painting into abstraction, and while it is a natural progression to go from ARTS 291 (Painting 1, a class solely about painting from observation) to Painting 2, it isn't mandatory that the two classes be taken in a specific order. Foundation Drawing 1 is a strong enough base in observation for ARTS 365 students. By putting specific constraints on which class a student must take in which order limits students ability to finish classes in a four year schedule if time conflicts arise. By changing the prerequisite of ARTS 291 to ARTS 151, students have more options.

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

Proposed by: Eric Elliott

Expected Implementation: Fall 2017

Course Modifications

ARTS 391

Intended semester to offer modified course for the 1st time: Fall 2017

	Current	Proposed
Course Prefix:	ARTS	
Course No.:	391	
Credit Hours:	3	
Course Title:	Painting Workshop 1	
Times for Credit:	1	1
Prerequisites:		
	Current: ARTS 365	
	Proposed: ARTS 291 or ARTS 365	
Requirement or listed choice for any program of study:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Change affects program sheet or grad requirements:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Justification:

Allowing students to enroll in ARTS 391 with either ARTS 291 or ARTS 365, students have more options on what order they can take classes. By putting specific constraints on which class a student must take in which order limits students ability to finish classes in a four year schedule if time conflicts arise.

Proposed by: Eric Elliott

Expected Implementation: Fall 2017

Course Modifications

ARTT 270

Intended semester to offer modified course for the 1st time: Fall 2017

	Current	Proposed
Course Prefix:	ARTT	
Course No.:	270	
Credit Hours:	3	
Course Title:	Sculpture I	
Times for Credit:	1	1
Prerequisites:		
Current:	ARTS 102	
Proposed:	NONE	
Requirement or listed choice for any program of study:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Change affects program sheet or grad requirements:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Justification:

The pre-requisite for ARTT 270 is labeled as ARTS 102 which is no longer offered and has been replaced with ARTE102. The content and curriculum for ARTT 270 does not need the support of the pre-requisite ARTE 102. Students can and will still take ARTE 102 for their majors. This will alleviate schedule conflicts and increase enrollment for ARTT 270.

Proposed by: Araan Schmidt

Expected Implementation: Fall 2017

Program Modification

Animation, Film and Motion Design: 3279

Degree Type: BFA

Modified Program Name: Animation, Film, Photography and Motion Design

Modified Program Name: AFP&MD

Revision to program sheet: Yes No

Description of modification:

Three new courses in photography will be added to the current Animation, Film and Motion Design BFA to become Animation, Film, Photography and Motion Design. Rather than adding to the number of major credits, the three new courses will replace courses currently listed in the major.

Justification:

Creative use of digital still and film cameras is basic to animation, film and motion design. But new and innovative digital imaging technologies offer more elaborate and complex application of digital imaging and AF&MD students are poised to develop advanced skills related to these new technologies. Consequently, additional courses specifically devoted to the study of photography, and especially studio lighting, will provide the necessary focus on emerging trends while enhancing student knowledge and application of the traditional art form. AF&MD students recognize the need to understand and apply advanced image technologies and have been requesting additional courses in photography and digital imaging. Typical of current trends is the following statement by well-known New York photographer, Joshua Allen Harris: "The definition of photography is changing and becoming more of a language."

Revision to SLOs: Yes No

The only change to the current learning outcomes listed below is the addition of the word photography to # 6.

- 1) 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 application of tools, materials, techniques, and proper use and care for equipment through quality craftsmanship. (Applied Learning)
 3. Generate individual response through concept and theory beyond formal elements to create personal content. (Communication Fluency)
 4. Communicate clearly regarding the critical analysis of art and design both historical and contemporary. (Critical thinking/Communication Fluency)
 5. Design and publish a professional portfolio and demo reel that meet current industry standards. (Applied Learning)
 6. Demonstrate technical, aesthetic, and conceptual decisions based on application of the creative design process for photography and time-based media. (Specialized Knowledge)

(See Attachment 1 for additional details)

Other changes: Yes No

Discussions with affected departments:

N/A

Proposed by: Carolyn Quinn-Hensley

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Art-Studio Art: 3272

Degree Type: BFA

Revision to program sheet: Yes No

Description of modification:

This modification has been put into place to broaden our BFA studio students experience in both 2-D and 3-D areas of study. Students will now be required to take a 200 level class in each of the different Studio Art areas of study: drawing, painting, printmaking, ceramics and sculpture. In order to accommodate this, we are changing the program sheet to have students take five Art History classes rather than the previous seven.

Justification:

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. Students will now be required to take a class in each of the 2-D (drawing, painting, and printmaking) and 3-D (ceramics, sculpture) studio disciplines. This exposes students to a variety of ways to think and solve visual problems. They can then decide in which area of interest they would like to specialize. This cross-disciplinary exposure (along with the study of Art History) gives our students a stronger understanding of the arts, which better prepares them for graduate school and a career as a professional artist.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Eric Elliott

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Studio Art: M200

Degree Type: Minor

Revision to program sheet: Yes No

Description of modification:

On page two, change all references to "ARTS" courses to "ART_" courses. On page two, delete the word "Fibers" from the paragraph listing student choices for 200-level Studio Art requirements.

Justification:

The Studio Art minor requires students to take 9 semester hours of 200-level Studio Art courses and 9 semester hours of 300- or 400-level Studio Art courses. The spaces on the program sheet where students note the specific courses taken is preceded by the course prefix ARTS. Studio courses can also have the prefix ARTT if they are Sculpture courses, so the program sheet should be amended to reflect this. This change will eliminate the need to submit Course Substitution forms for students who take ARTT courses to fulfill minor requirements. The CMU Art and Design department no longer offers Fibers courses, thus the need to remove that reference.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Teresa S. Garner

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Department: Business

Course Additions

CISB 309 Credit Hours 3

Course Title: Enterprise Systems

Abbreviated Title: Enterprise Systems

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 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

CISB 210

Prerequisite for other course(s): Yes No

Co-requisites: Yes No

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

Business BS, Computer Information Systems: 3165

Business BAS, Computer Information Systems: 3167

Business BBA, Business Administration-Information Systems: 3123

Business Minor, Computer Information Systems: M751

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:

Theoretical and practical issues of enterprise systems within organizations. Demonstrates how enterprise systems integrate information and organizational processes across functional areas with a unified system comprised of a single database and shared reporting tools.

Justification:

This course in the IS2010 model curriculum is more appropriate for CIS majors and minors than CISB 310 Enterprise Architecture.

Topical course outline:

- o Business processes and business process integration
- o Making the case for acquiring and implementing enterprise systems
- o Analyzing business requirements for selecting and implementing an enterprise system
- o Selection of enterprise systems software
- o Challenges associated with the implementation of global enterprise systems applications
- o Organizational change and change management

Course Additions

- o Strategic alignment
- o User commitment
- o Communications
- o Training
- o Job redesign
- o Governance of processes and data
- o Post-implementation issues
- o Enterprise system processes
- o Order processing
- o Purchasing
- o Production logistics
- o Accounting
- o Planning and control
- o Human resource functions
- o How enterprise systems support business

Student Learning Outcomes:

1. Explain the fundamentals of enterprise systems and issues associated with their implementation.
2. Evaluate the costs and benefits of implementing an enterprise system.
3. Describe how enterprise systems integrate functional areas into one enterprise-wide information system.
4. Explain how "best practices" are incorporated in enterprise systems.
5. Explain how an organizational process often spans different functional areas.
6. Describe the role of enterprise systems in carrying out processes in an organization.
7. Integrate key concepts from functional-oriented courses, such as accounting, marketing, and organizational behavior, to promote the development of integrative skills.
8. Explain how integrated information sharing increases organizational efficiencies.
9. Identify, describe, and evaluate the major enterprise system software providers and their packaged systems.
10. Describe current trends related to enterprise systems.

Proposed by: Don Carpenter

Expected Implementation: Fall 2017

Course Modifications

CISB 310

Intended semester to offer modified course for the 1st time: Fall 2017

Current

Proposed

Course Prefix: CISB

Course No.: 310

Credit Hours: 3

Course Title: Enterprise Architecture

Times for Credit: 1

1

Prerequisites:

Current: CISB 210

Proposed: CISB 309

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

Change affects program sheet or grad requirements: Yes No

Business BS, Computer Information Systems: 3165

Business BAS, Computer Information Systems: 3167

Business BBA, Business Administration-Information Systems: 3123

Business Minor, Computer Information Systems: M751

Course is a requirement for a new program:

N/A

Justification:

CISB 309 will replace CSIB 310 in four programs and will be the prerequisite to CISB 310.

Discussions with affected departments:

N/A

Proposed by: Don Carpenter

Expected Implementation: Fall 2017

Course Modifications

CISB 442

Intended semester to offer modified course for the 1st time: Spring 2018

	Current	Proposed
Course Prefix:	CISB	
Course No.:	442	
Credit Hours:	3	
Course Title:	Systems Analysis and Design	
Times for Credit:	1	1

Prerequisites:

Current: CISB 210, CISB 310, CISB 315 (may be taken concurrently), CISB 410, and CISB 206 or CSCI 110 or CSCI 111, or permission of instructor.

Proposed: CISB 210, CISB 309, CISB 315 (may be taken concurrently), CISB 410, and CISB 206 or CSCI 110 or CSCI 111, or permission of instructor.

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

Change affects program sheet or grad requirements: Yes No

Business BS, Computer Information Systems: 3165

Business BAS, Computer Information Systems: 3167

Business BBA, Business Administration-Information Systems: 3123

Business Minor, Computer Information Systems: M751

Course is a requirement for a new program:

N/A

Justification:

CISB 310 is being removed from four programs and CISB 309 will replace CISB 310 as prerequisite to CISB 442.

Discussions with affected departments:

N/A

Proposed by: Don Carpenter

Expected Implementation: Fall 2017

Program Modification

Computer Information Systems: 3167

Degree Type: BAS

Revision to program sheet: Yes No

Description of modification:

CISB 309 Enterprise Systems is replacing CISB 310 Enterprise Architecture. Miscellaneous clean-up to SLOs, ordering of required CIS courses, and electives.

Justification:

CISB 309 is a more appropriate course than CISB 310 in the IS2010 model curriculum for CIS majors.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

N/A

Proposed by: Don Carpenter

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Business Economics: 3122

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Revise minimum upper division credit hours restriction under Concentration Electives.
5. Remove one KINA activity credit to correct for incomplete revision of program sheet in prior year.
6. Sequence BUGB 231 in Fall, sophomore year. Move MARK 231 to Fall, junior year.
7. Replace ECON 310 with ECON 320 in sequencing, Spring, senior year (clean-up).
8. Miscellaneous formatting clean-up (SLOs, Foundation Courses, ESSL - Math, sequencing - total hours per semester).

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231. Concentration elective credit requirements were also adjusted to uphold the requirement that bachelor programs include at least 40 upper division credit hours.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Emerging Markets: 3172

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Revise minimum upper division credit hours restriction under Concentration Electives.
5. Sequence BUGB 231 in Fall, sophomore year. Move MARK 231 to Fall, junior year.
6. Miscellaneous formatting clean-up (sequencing of junior & senior years, degree requirements, BA core).

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231. Concentration elective credit requirements were also adjusted to uphold the requirement that bachelor programs include at least 40 upper division credit hours.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Energy Management/Landman: 3118

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Sequence BUGB 231 in Fall, sophomore year. Move MARK 231 to Fall, junior year.
5. Miscellaneous clean-up (SLOs, sequencing, concentration courses).

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Entrepreneurship: 3119

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Revise minimum upper division credit hours restriction under Concentration Electives.
5. Sequence BUGB 231 in Fall, sophomore year. Move MARK 231 to Fall, junior year.
6. Miscellaneous clean-up (SLOs, concentration courses)

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231. Concentration elective credit requirements were also adjusted to uphold the requirement that bachelor programs include at least 40 upper division credit hours.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Finance: 3125

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Revise minimum upper division credit hours restriction under Concentration Electives.
5. Sequence BUGB 231 in Fall, sophomore year. Move MARK 231 to Fall, junior year.
6. Miscellaneous clean-up (SLOs, sequencing, ESSL-Math, concentration courses).

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231. Concentration elective credit requirements were also adjusted to uphold the requirement that bachelor programs include at least 40 upper division credit hours.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Hospitality Management: 3171

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Sequence BUGB 231 in Fall, sophomore year. Move MARK 231 to Spring, freshman year. Move CISB 210 to Spring, junior year.
5. Miscellaneous clean-up (sequencing).

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Human Resource Management: 3128

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Revise minimum upper division credit hours restriction under Concentration Electives.
5. Sequence BUGB 231 in Fall sophomore year. Move ESSL - Natural Science to Fall, junior year.
6. Miscellaneous clean-up (SLOs, sequencing).

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231. Concentration elective credit requirements were also adjusted to uphold the requirement that bachelor programs include at least 40 upper division credit hours.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Information Systems: 3123

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. CISB 309 Enterprise Systems replaces CISB 310 Enterprise Architecture.
5. Sequence BUGB 231 in Fall, sophomore year. Move CISB 310 to Fall, junior year.
6. Miscellaneous clean-up (SLOs, sequencing, electives).

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231. In an additional change, following the IS2010 model curriculum, CISB 309 is a more appropriate course than CISB 310 for IS concentrators.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Insurance: 3169

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Revise minimum upper division credit hours restriction under Concentration Electives.
5. Sequence BUGB 231 in Fall, sophomore year. Move MARK 231 to Fall, junior year.
6. Miscellaneous clean-up (SLOs, concentration courses, sequencing).

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231. Concentration elective credit requirements were also adjusted to uphold the requirement that bachelor programs include at least 40 upper division credit hours.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Management: 3126

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Revise minimum upper division credit hours restriction under Concentration Electives and clean up/clarify wording under Concentration Electives and Electives.
5. Sequence BUGB 231 in Fall, sophomore year. Move MARK 231 to Fall, junior year.
6. Miscellaneous clean-up (SLOs, sequencing, management nucleus).

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231. Concentration elective credit requirements were also adjusted to uphold the requirement that bachelor programs include at least 40 upper division credit hours.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Managerial Informatics: 3168

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Revise minimum upper division credit hours restriction under Concentration Electives.
5. Sequence BUGB 231 in Fall, sophomore year. Move MARK 231 to Fall, junior year.
6. Miscellaneous clean-up (SLOs, sequencing, concentration courses).

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231. Concentration elective credit requirements were also adjusted to uphold the requirement that bachelor programs include at least 40 upper division credit hours.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business Administration-Marketing: 3127

Degree Type: BBA

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 from Concentration Requirements.
2. Add BUGB 231 to Foundation Courses.
3. Adjust credit hours for affected sections accordingly.
4. Revise minimum upper division credit hours restriction under Concentration Electives.
5. Sequence BUGB 231 in Fall, sophomore year. Move MARK 231 to Fall, junior year.
6. Miscellaneous clean-up (SLOs, sequencing, ESSL-Math)

Justification:

Students in bachelors programs must be able to complete their degree by earning an additional 60 credit hours beyond the Associate's level, while current BBA programs require 63 credit hours of concentration requirements. In addition, the state-wide transfer articulation agreement requires bachelor programs to accept a foundation level business law course, while current BBA programs instead require BUGB 349 (Legal Environment of Business) as a concentration course. The Business Department seeks to correct these problems in two steps. In the first step (completed last Fall), BUGB 231, Survey of Business Law, was redesigned and updated to include coverage of the same material as BUGB 349. BUGB 349 will be gradually phased out and deleted. In the second step (the current proposal), we seek to modify current BBA programs by removing the concentration course requirement BUGB 349 and adding the foundation course BUGB 231. Concentration elective credit requirements were also adjusted to uphold the requirement that bachelor programs include at least 40 upper division credit hours.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Computer Information Systems: 3165

Degree Type: BS

Revision to program sheet: Yes No

Description of modification:

CISB 309 Enterprise Systems is replacing CISB 310 Enterprise Architecture.

MATH 113 College Algebra is replacing MATH 121 Calculus for Business.

Corrections are made to the Suggested Course Sequence.

Miscellaneous clean-up (SLOs, CIS Core, sequencing)

Justification:

CISB 309 is a more appropriate course than CISB 310 in the IS2010 model curriculum for CIS majors.

MATH 121 was an entrance block and not needed as accreditation efforts are switched from ABET to AACSB.

One Social and Behavior Science ESSL course was left out of the Suggested Course Sequence.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

Dr. Carpenter discussed the change in the requirement from MATH 121 to MATH 113 for a BS in Computer Information Systems in the Essential Learning Category with Dr. Lori Payne, Academic Department Head for the CSMS Department. This change will affect the enrollment in those two courses. Dr. Payne understood rationale for the change.

Proposed by: Don Carpenter

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Accounting: M135

Degree Type: Minor

Revision to program sheet: Yes No

Description of modification:

1. Remove CISB 205, Advanced Business Software
2. Add CISB 101, Business Information Technology

Justification:

To remove a hidden prerequisite (CISB 101 is a prerequisite to CISB 205). Relevant material previously covered in CISB 205 (e.g., advanced spreadsheet analysis) will be covered in ACCT 331.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Business: M130

Degree Type: Minor

Revision to program sheet: Yes No

Description of modification:

1. Remove BUGB 349 (Legal Environment of Business).
2. Add BUGB 231 (Survey of Business Law)

Justification:

The state-wide transfer articulation agreement requires a 200 level business law course. BUGB 231 was revised last Fall to cover the same material as BUGB 349. BUGB 349 will be phased out and deleted.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Geoffrey Gurka

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Computer Information Systems: M751

Degree Type: Minor

Revision to program sheet: Yes No

Description of modification:

CISB 309 Enterprise Systems is replacing CISB 310 Enterprise Architecture

Justification:

CISB 309 is a more appropriate course than CISB 310 in the IS2010 model curriculum for CIS minors.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Don Carpenter

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Department: Computer Science, Mathematics and Statistics

Program Additions

Mathematics - Applied Mathematics

Degree Type: BS

Abbreviated Name: Applied Mathematics

Proposed by: Phil Gustafson

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Course Additions

MATH 150

Credit Hours 1

Course Title: Topics and Careers in Mathematics

Abbreviated Title: Topics & Careers in Math

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 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

EL SLO:

Prerequisites: Yes No

MATH 151 Calculus I OR MATH 135 Engineering Calculus I OR MATH 146 Calculus for Biology (any of these courses may be taken concurrently with MATH 150.)

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-Mathematics: 3424

CSMS BS, Mathematics-Secondary Education: 3430

CSMS BS, Mathematics-Statistics: 3434

Course is a requirement for a new program:

Mathematics - Applied Mathematics Concentration

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 nature of mathematical thinking. Advanced topics and applications of mathematics and statistics will be presented at an introductory level. Career options will be investigated.

Justification:

This course will be a required course for each of the mathematics programs and concentrations (mathematics, applied math, secondary education, statistics). This course will introduce students to important perspectives in the major and expose students to career options so that they can get more out of the major. This course has been run as a topics course in Fall 2016 and will be offered as a topics course again in Spring 2017. The course is being offered in response to retention efforts. Many students are not exposed to the interesting mathematical concepts that are found beyond calculus until late in the program, so this course will introduce a variety of topics that may better represent the field of mathematics.

Topical course outline:

Perspectives in mathematical thinking

Careers in mathematics: national and local

Course Additions

The mathematics program and concentration choices
Discussions with senior math majors
Discussions with math alumni
Mathematical content topics will vary by semester and instructor

Student Learning Outcomes:

Identify careers for which mathematics majors may be hired.
Identify five different content areas in mathematics.
Describe an area of interest in mathematics.
List the different concentrations offered within the mathematics program.

Discussions with affected departments:

NA

Proposed by: Phil Gustafson

Expected Implementation: Fall 2017

Course Additions

MATH 366

Credit Hours 3

Course Title: Methods of Applied Mathematics II

Abbreviated Title: Methods Appl Math II

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 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

EL SLO: ?

Prerequisites: Yes No

MATH 360 and (CSCI 110/110L, CSCI 111, CSCI 130 or CSCI 310)

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-Mathematics: 3424

Course is a requirement for a new program:

Mathematics - Applied Mathematics Concentration

Overlapping content with present courses offered on campus: Yes No

There is some overlap with content in MATH 361 Numerical Analysis; however, this course will largely cover topics not found in MATH 361.

Additional faculty FTE required: Yes No

Additional equipment required: Yes No

Additional lab facilities required: Yes No

Course description for catalog:

Treatment of numerical methods used to solve problems in applied mathematics. Topics include iteration, interpolation, numerical integration and differentiation, numerical linear algebra, numerical solutions of matrix eigenvalue problems, and numerical solutions of ordinary and partial differential equations.

Justification:

This course will form part of a required upper level sequence in the applied mathematics concentration.

Topical course outline:

Iteration, interpolation, splines, numerical integration and differentiation, Gaussian elimination, LU factorization, norms, least squares method, matrix eigenvalue problems, QR factorization, numerical solution of ordinary and partial differential equations.

Student Learning Outcomes:

Analyze numerical methods of solution for applied mathematics.

Implement algorithms associated with numerical methods using computer programs and computational software.

Discussions with affected departments:

Course Additions

Discussions with faculty in the departments of physics and computer science have been ongoing during the development of this proposal.

Proposed by: Phil Gustafson

Expected Implementation: Fall 2017

Course Additions

MATH 466

Credit Hours 3

Course Title: Methods of Applied Mathematics III

Abbreviated Title: Methods Appl Math III

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 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

EL SLO:

Prerequisites: Yes No

MATH 366

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-Mathematics: 3424

Course is a requirement for a new program:

Mathematics - Applied Mathematics Concentration

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 advanced methods of applied mathematics with an emphasis on extending basic methods and concepts. Specific content may vary but will typically include contemporary techniques in applied mathematics, modeling and data analysis.

Justification:

This course will form part of a required upper level sequence in the applied mathemtaics concentration.

Topical course outline:

Advanced methods of ordinary and partial differential equations

Advanced methods of applied linear algebra

Advanced methods of mathematical modeling

Advanced numerical methods

Student Learning Outcomes:

Apply analytical methods of solution to ordinary and partial differential equations.

Model complex phenomena using advanced methods of applied mathematics.

Implement numerical methods of solution to applied problems.

Discussions with affected departments:

Discussions with faculty in the physics department have been ongoing during the development of this proposal.

Course Additions

Proposed by: Phil Gustafson

Expected Implementation: Fall 2017

Course Modifications

MATH 225

Intended semester to offer modified course for the 1st time: Fall 2017

	Current	Proposed
Course Prefix:	MATH	
Course No.:	225	
Credit Hours:	3	2
Course Title:	Computational Linear Algebra	
Contact hours:	Lecture 3 Lab Field Studio Other	Lecture 2 Lab Field Studio Other
Engage Min.:	2250	1500
Prep Min.:	4500	3000
Times for Credit:	1	1

Prerequisites:

Current: MATH 253

Proposed: MATH 151 or MATH 135 or MATH 146

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

Course is a requirement for a new program:

Mathematics - Applied Mathematics Concentration

Justification:

This course will treat essential computational aspects of linear algebra. Reducing the number of credit hours from 3 to 2 will better reflect the credit hours required for this course. This course has not been offered for many years and reintroducing the course with a lower prerequisite will allow interested students majoring in computer science, engineering, physics, etc. to take the course and learn the computational tools of linear algebra without having to take proof-based courses.

Topical course outline, current:

NA

Topical course outline, proposed:

NA

Student Learning Outcomes, current:

NA

Student Learning Outcomes, proposed:

NA

Discussions with affected departments:

NA

Proposed by: Phil Gustafson

Expected Implementation: Fall 2017

Course Modifications

MATH 325

Intended semester to offer modified course for the 1st time: Spring 2018

	Current	Proposed
Course Prefix:	MATH	
Course No.:	325	
Credit Hours:	3	
Course Title:	Linear Algebra I	Linear Algebra
Times for Credit:	1	1
Prerequisites:		

Current: MATH 240 or MATH 369

Proposed: MATH 225 and MATH 240

Description for catalog:

Current: Matrices, solving systems of equations, determinants, vectors, vector spaces, linear transformations and eigenvalues.

Proposed: Proof-based treatment of vector spaces, linear transformations, bases, coordinate systems, eigenvalues, eigenspaces, diagonalization, as well as applications.

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

Course is a requirement for a new program:

Mathematics - Applied Mathematics Concentration

Justification:

The computational aspects of MATH 325 will be taught in MATH 225. Making MATH 225 a prerequisite for MATH 325 will allow for a more conceptual treatment of linear algebra in MATH 325 and will also enable additional topics to be covered in MATH 325. MATH 369 was previously listed as an alternative prerequisite to MATH 240 to allow computer science students to enroll in MATH 325. However, MATH 225 will be the more appropriate course for computer science students and MATH 396 will no longer adequately prepare students for MATH 325. The change in the name of the course better reflects the linear algebra course sequencing.

Topical course outline, current:

Matrices, vectors, solving systems of equations, Gaussian elimination, determinants, vector spaces and subspaces, null space and column space, linear transformations, linear independence, bases, spanning sets, coordinate systems, rank, change of basis, eigenvalues and eigenvectors. Computational and proof methods covered.

Topical course outline, proposed:

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. Theory and proof emphasized.

Student Learning Outcomes, current:

Solve a system of linear equations by row reducing the equivalent matrix system

Find coefficients on a basis expansion of a vector

Determine linear dependence or independence of a set of vectors

Compute a determinant using a cofactor expansion.

Course Modifications

Show whether a subset of a vector space is a subspace.

Find eigenvalues and eigenvectors.

Write complete proofs demonstrating validity of basic linear algebra results.

Student Learning Outcomes, proposed:

Determine linear dependence or independence of a set of vectors

Show whether a subset of a vector space is a subspace.

Given two bases, find the change of basis matrix.

Find eigenspaces associated with eigenvectors.

Find diagonalization of a matrix.

Write complete proofs demonstrating validity of basic linear algebra results.

Essential Learning SLOs, proposed:

NA

Discussions with affected departments:

NA

Proposed by: Phil Gustafson

Expected Implementation: Fall 2017

Course Modifications

MATH 460

Intended semester to offer modified course for the 1st time: Fall 2018

	Current		Proposed
Course Prefix:	MATH		
Course No.:	460		
Credit Hours:	3		
Course Title:	Linear Algebra II		Advanced Linear Algebra
Abbreviated Title:	Linear Algebra II		Adv Linear Algebra
Times for Credit:	1		1
Requirement or listed choice for any program of study:	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/>
Change affects program sheet or grad requirements:	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/>

CSMS BS, Mathematics-Mathematics: 3424

CSMS BS, Mathematics-Statistics: 3434

Course is a requirement for a new program:

Mathematics - Applied Mathematics Concentration

Justification:

MATH 460 is an advanced treatment of linear algebra, rather than a continuation of MATH 325 Linear Algebra.

Discussions with affected departments:

NA

Proposed by: Phil Gustafson

Expected Implementation: Fall 2018

Course Modifications

STAT 425

Intended semester to offer modified course for the 1st time: Fall 2017

	Current	Proposed
Course Prefix:	STAT	
Course No.:	425	
Credit Hours:	3	
Course Title:	Design and Analysis of Experiments	
Times for Credit:	1	1
Prerequisites:		

Current: STAT 412

Proposed: STAT 311, and MATH 121 or MATH 135 or MATH 146 or MATH 151

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

Change affects program sheet or grad requirements: Yes No

Justification:

Originally the STAT 412 prerequisite was imposed for suggested course sequencing. Eliminating the STAT 412 prerequisite and imposing the same prerequisites as STAT 412 gives students more flexibility.

Discussions with affected departments:

NA

Proposed by: Rick Ott

Expected Implementation: Fall 2017

Program Modification

Mathematics-Mathematics: 3424

Degree Type: BS

Revision to program sheet: Yes No

Description of modification:

1. Rearranging the listing of courses in the degree and moving some courses from the Core to concentration requirements.
2. Following suit with other programs, we are moving the two credits of MATH 151 Calculus I from Foundations to Electives. The first three credits of this course count toward the Essential Learning requirement.
3. Adding the new course MATH 150 (1 credit) as a required course.
4. Adding MATH 225 as a required course in the Core.
5. Changing the name of MATH 325 Linear Algebra I to Linear Algebra. (Note, no changes to the program sheet need to be made here, the name on the program sheet is already Linear Algebra.)
6. Changing the name of MATH 460 from Linear Algebra II to Advanced Linear Algebra.
7. Adding new courses, MATH 366 and MATH 466 to the list of major electives.

Justification:

1. We are adjusting our list of Core courses in order to be consistent among all concentrations of the mathematics degree. Currently, the majority of Major courses are listed under the core and some of those are being moved to a section heading of Required Courses.
2. To be sure we do not exceed the "48 credits in major discipline" rule, we are moving the extra credits from the Essential Learning course, MATH 151 Calculus I, to the electives section. Many other majors have done this with the additional credit from MATH 113 College Algebra or with the additional 2 credits from MATH 151.
3. Many students do not know that there are very interesting and (different) mathematical topics and methods beyond calculus and they do not know what can be done with a degree in mathematics. So, to address retention efforts by the university, we are creating a new course MATH 150 Topics & Careers in Math. We have taught this as a topics course and feel that all math majors or those interested in mathematics will benefit from the 1-credit course.
4. MATH 225 Computational Linear Algebra is being made a prerequisite course to MATH 325 Linear Algebra (see justification on course modification forms) and hence must be included in the Core for all math degrees.
5. The name of the course MATH 325 is changing but does not need to be updated on the program sheet.
6. The name of the course MATH 460 is changing and must be updated on the program sheet.
7. New courses are being added for the Applied Mathematics concentration and we would like to make those courses available as electives for the Mathematics Major.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Lisa Driskell

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Mathematics-Secondary Education: 3430

Degree Type: BS

Revision to program sheet: Yes No

Description of modification:

1. Rearranging the listing of courses in the degree and moving some courses from the Core to concentration requirements.
2. Adding the new course MATH 150 (1 credit) as a required course.
3. Adding MATH 225 as a required course in the Core.
4. Changing the name of MATH 325 Linear Algebra I to Linear Algebra.
5. In course sequencing guide, removing ESSL Social/Behavioral Science OR Humanities from Fall Sophomore year. All Humanities and SBS requirements were already in the sequencing and this should have been an Elective.

Justification:

1. We are adjusting our list of Core courses in order to be consistent among all concentrations of the mathematics degree. Currently, the majority of Major courses are listed under the core and some of those are being moved to a section heading of Required Courses.
2. Many students do not know that there are very interesting and (different) mathematical topics and methods beyond calculus and they do not know what can be done with a degree in mathematics. So, to address retention efforts by the university, we are creating a new course MATH 150 Topics & Careers in Math. We have taught this as a topics course and feel that all math majors or those interested in mathematics will benefit from the 1-credit course.
4. MATH 225 Computational Linear Algebra is being made a prerequisite course to MATH 325 Linear Algebra (see justification on course modification forms) and hence must be included in the Core for all math degrees.
5. The name of the course MATH 325 is changing.
6. This listing of ESSL Social/Behavioral Science OR Humanities in the course sequencing was an error and should have been electives. However, there are 3 fewer electives with the above changes and therefore the listing is being removed completely from the sequence.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

Department of Education - discussions in progress.

Proposed by: Lisa Driskell

Director of Teacher Education Signature: Blake R. Bickham

Expected Implementation: Fall 2017

Program Modification

Mathematics-Statistics: 3434

Degree Type: BS

Revision to program sheet: Yes No

Description of modification:

1. Rearranging the listing of courses in the degree and moving some courses from the Core to concentration requirements.
2. Following suit with other programs, we are moving the two credits of MATH 151 Calculus I from Foundations to Electives. The first three credits of this course count toward the Essential Learning requirement.
3. Removing MATH 394 Mathematics Colloquium from the degree requirements.
4. Adding the new course MATH 150 (1 credit) as a required course.
5. Adding MATH 225 as a required course in the Core.
6. Changing the name of MATH 325 Linear Algebra I to Linear Algebra.
7. Changing the name of MATH 460 from Linear Algebra II to Advanced Linear Algebra.

Justification:

1. We are adjusting our list of Core courses in order to be consistent among all concentrations of the mathematics degree. Currently, the majority of Major courses are listed under the core and some of those are being moved to a section heading of Required Courses.
2. To be sure we do not exceed the "48 credits in major discipline" rule, we are moving the extra credits from the Essential Learning course, MATH 151 Calculus I, to the electives section. Many other majors have done this with either the additional credit from MATH 113 College Algebra or with the additional 2 credits from MATH 151.
3. MATH 394 Mathematics Colloquium course was not easily sustainable and attendance was low. The course is no longer required for any of our other concentrations. We believe that the MATH 150 course will better meet the needs and interests of the students. We plan to continue hosting Mathematics Colloquia on a monthly rather than weekly basis but will not offer it as a course.
4. Many students do not know that there are very interesting and (different) mathematical topics and methods beyond calculus and they do not know what can be done with a degree in mathematics. So, to address retention efforts by the university, we are creating a new course MATH 150 Topics & Careers in Math. We have taught this as a topics course and feel that all math majors or those interested in mathematics will benefit from the 1-credit course.
5. MATH 225 Computational Linear Algebra is being made a prerequisite course to MATH 325 Linear Algebra (see justification on course modification forms) and hence must be included in the Core for all math degrees.
6. The name of the course MATH 325 is changing and must be updated on the program sheet.
7. The name of the course MATH 460 is changing and must be updated on the program sheet.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

NA

Proposed by: Lisa Driskell

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Program Modification

Statistics: M465

Degree Type: Minor

Revision to program sheet: Yes No

Description of modification:

In recent years STAT 215 and STAT/CISB 241 courses have been created as introductory courses for the social and behavioral sciences and business respectively. We will include these courses as alternatives to STAT 200. We are also adding STAT 305 Statistics and Quality Control for Engineering to the list of electives for the minor.

Justification:

Currently STAT 200 is listed as the only introductory statistics courses in the statistics minor. In recent years STAT 215 and STAT/CISB 241 courses have been created as introductory courses for the social and behavioral sciences and business respectively. Since all three courses cover many of the same statistical principles, any of three should suffice for the statistics minor. STAT 305 was a new course a couple years ago and is appropriate as an elective course for the minor.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

CISB-Reviewed and Approved by Steve Norman

Proposed by: Rick Ott

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Department: Health Sciences

Program Additions

Radiologic Sciences

Degree Type: BS

Abbreviated Name: Rad Sciences

Proposed by: Patti Ward

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Course Additions

RADS 320

Credit Hours 3

Course Title: Introduction to Radiologic Technology and Patient Care

Abbreviated Title: Intro to RT and Pt Care

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 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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

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Course description for catalog:

Introduction to radiologic technology with emphasis on the education program, the profession, and the healthcare delivery system. Fundamentals of patient care including ethics, professional conduct, communication, radiation protection, and patient management. Study of medical terminology is included.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- II. Health Care System
- II. Infection Control
- III. Medical Emergencies
- IV. Communication and Professionalism in Patient Care
- V. Ethics and Law in Radiologic Sciences
- VI. Medical Terminology

Student Learning Outcomes:

1. Identify the responsibilities of the health care facility and members of the health care team.
2. Describe the importance of standard precautions and isolation procedures that includes sources and modes of transmission of infection and disease and institutional control procedures.
3. Describe vital signs and lab values used to assess patient condition, including sites for assessment and

Course Additions

normal values.

4. Describe appropriate procedures for management of various types of trauma situations.
5. Identify symptoms related to specific medical emergencies.
6. Discuss the interrelationship between personal, community, and societal values.
7. Explain the role of the radiographer in patient education.
8. Critique orders, requests, and diagnostic reports.
9. Explain the role of ethical behavior in health care delivery.
10. Identify legal and professional standards and relate each to practice in health professions.
11. Explain the legal implications of professional liability, malpractice, professional negligence, and other legal doctrines applicable to professional practice.
12. Define medical imaging and radiation oncology terms.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 320L

Credit Hours 1

Course Title: Introduction to Radiologic Technology and Patient Care Lab

Abbreviated Title: Intro RT and Pt Care 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 2017

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 radiologic technology with emphasis on the education program, the profession, and the healthcare delivery system. Fundamentals of patient care including ethics, professional conduct, communication, radiation protection, and patient management. Study of medical terminology is included.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Introduction to Radiography & Radiographic Equipment
- II. Safety and Transfer
- III. Infection Control and Aseptic Techniques
- IV. Nonaseptic Technique and Contrast Media
- V. Evaluating Physical Needs
- VI. Tubes, Catheters, Lines and Other Devices
- VII. Radiation Protection

Student Learning Outcomes:

1. Recognize and define basic components of radiographic equipment.
2. Discuss basic radiographic equipment in terms of purpose.
3. Describe specific patient safety measures and concerns.
4. Demonstrate correct principles of body mechanics applicable to patient care.
5. Demonstrate techniques for specific types of patient transfer.
6. Demonstrate the medically aseptic hand washing technique.

Course Additions

7. Demonstrate the procedures for sterile gowning and gloving.
8. Obtain vital signs.
9. Identify specific types of tubes, lines, catheters and collection devices.
10. Explain the appropriate radiation protection required when performing mobile/surgical radiography.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 321

Credit Hours 2

Course Title: Radiographic Anatomy and Positioning I

Abbreviated Title: Rad Anat & Pos I

Contact hours per week: Lecture 2 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 1500 Student preparation minutes: 3000

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

Intended semester to offer course 1st time: Fall 2017

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:

Radiologic Sciences

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 every phase of radiography in an integrated coverage of the appendicular skeletal system, abdomen, thoracic, viscera, and body systems. Radiographic anatomy, positioning, and procedures are discussed and applied in the energized laboratory.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Standard Terminology for Positioning and Projection
- II. Anatomical Nomenclature
- III. Appendicular Skeletal and Respiratory Systems
- III. General Consideration
- III. Patient Considerations
- IV. Positioning Considerations for Routine Radiographic Procedures

Student Learning Outcomes:

1. Describe standard positioning terms.
2. Discuss the basics of anatomical nomenclature.
3. Classify tissue types, describe the functional characteristics of each and give examples of their location within the human body.
4. Identify and locate bones and bony processes and depression of the human skeleton.
5. Compare the types, locations and movements permitted by the different types of articulations.
6. Describe the composition and characteristics of the primary organs of the respiratory system.
7. Explain radiographic procedures to patients and family members.

Course Additions

8. Adapt general procedural considerations to specific clinical settings.
9. Adapt radiographic procedures for special considerations.
10. Explain the routine and special positions and projections for radiographic procedures.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 321L

Credit Hours 1

Course Title: Radiographic Anatomy and Positioning I

Abbreviated Title: Rad Anat and Pos I 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 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science Radiologic Sciences

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 every phase of radiography in an integrated coverage of the appendicular skeletal system, abdomen, thoracic, viscera, and body systems. Radiographic anatomy, positioning, and procedures are discussed and applied in the energized laboratory.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences..

Topical course outline:

- I. Identify Anatomy on Radiographic Images
- II. Identify Related Pathology on Radiographic Images
- III. Evaluate Radiographic Images for Quality
- IV. Perform Simulated Positioning Procedures

Student Learning Outcomes:

1. Identify the structures demonstrated on routine radiographic images.
2. Identify common pathological process demonstrated on routine radiographic images.
3. Evaluate images for positioning, centering, appropriate anatomy, and overall image quality.
4. Simulate radiographic and fluoroscopic procedures on a person or phantom in a laboratory setting.
5. Demonstrate proper use of positioning aids.
6. Apply general radiation safety and protection practices associated with radiographic and fluoroscopic examinations.

Discussions with affected departments:

Course Additions

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 322

Credit Hours 2

Course Title: Principles of Radiographic Exposure

Abbreviated Title: Prin of Rad Exposure

Contact hours per week: Lecture 2 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 1500 Student preparation minutes: 3000

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

Intended semester to offer course 1st time: Fall 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 fundamental factors that govern and influence the radiographic image, including equipment, accessory devices, and exposure mathematics. Technical and prime exposure factors are discussed and applied in the energized laboratory.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Structure of the Atom
- II. Nature of radiation
- III. Radiographic tube
- IV. X-ray production
- V. Factors that affect x-ray emission spectrum
- VI. Beam quality
- VII. Interaction of photons with matter
- VIII. Receptor exposure
- IX. Beam-limiting Devices
- X. Scatter Radiation
- XI. Grids
- XII. Exposure Factor Formulation
- XIII. Photographic qualities of radiograph
- XIV. Geometric qualities of radiograph

Course Additions

Student Learning Outcomes:

1. Describe fundamental atomic structure, nature of electromagnetic radiation, and radioactivity.
2. Identify components of the radiographic tube and explain the process of x-ray production and prime factors that control it.
3. Describe the x-ray emission spectrum, filtration, and x-ray interactions with matter.
4. Explain the principles of beam restriction, grids, receptor exposure, and exposure factor formulation.
5. Summarize the relationship of factors affecting photographic and geometric qualities of a radiograph.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 322 L

Credit Hours 1

Course Title: Priniciples of Radiographic Exposure Lab

Abbreviated Title: Prin of Rad Exposure 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 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 fundamental factors that govern and influence the radiographic image, including equipment, accessory devices, and exposure mathematics. Technical and prime exposure factors are discussed and applied in the energized laboratory.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Radiographic tube
- II. Factors that affect x-ray emission spectrum
- III. Beam quality
- IV. Interaction of photons with matter
- V. Receptor exposure
- VI. Beam-limiting Devices
- VII. Scatter Radiation
- VIII. Grids
- IX. Exposure Factor Formulation
- X. Photographic qualities of radiograph
- XI. Geometric qualities of radiograph

Student Learning Outcomes:

1. Identify components of the radiographic tube and explain the process of x-ray production and prime

Course Additions

factors that control it.

2. Describe factors that affect the x-ray emission.

3. Explain x-ray interactions with matter.

4. Explain the principles of beam restriction, grids, receptor exposure, and exposure factor formulation.

5. Summarize the relationship of factors affecting photographic and geometric qualities of a radiograph.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 323 Credit Hours 2

Course Title: Digital Imaging

Abbreviated Title: Digital Imaging

Contact hours per week: Lecture 2 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 1500 Student preparation minutes: 3000

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

Intended semester to offer course 1st time: Fall 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 components, principles, and operation of digital imaging systems found in diagnostic radiology. Factors affecting image acquisition, display, archiving, and retrieval are discussed.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Image acquisition
- II. Initial processing
- III. Post processing
- IV. Image evaluation
- V. Image display
- VI. Data management

Student Learning Outcomes:

1. Describe and compare the various types of digital receptors.
2. Evaluate digital detector characteristics and their effects on image quality and patient exposure.
3. Explain raw data extraction and exposure indicators.
4. Describe initial data processing and post processing.
5. Explain digital image characteristics and associate impact of the common errors to image acquisition and display.
6. Discuss data management.

Course Additions

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 329

Credit Hours 1

Course Title: Radiographic Clinical Experience I

Abbreviated Title: Rad Clinical Exp. I

Contact hours per week: Lecture Lab 3 Field Studio Other

Type of Instructional Activity: Laboratory: Academic/Clinical

Academic engagement minutes: 2250 Student preparation minutes: 1125

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

Intended semester to offer course 1st time: Fall 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 radiographic clinical education experience in the clinical education site. Designed to provide patient care and assessment, competent performance of radiologic imaging, and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during, and following the radiologic procedure.

Justification:

This was an existing course combined with a clinical lab. The existing content from the clinical lab was moved in whole to RADS 320L. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences .

Topical course outline:

I. Clinical Practice

1. Code of ethics and professional behavior
2. Professional communication
3. Values
4. Culture, ethnicity and diversity

II. Procedural Performance

1. Scheduling and sequencing of exams
2. Order/requisition evaluation and corrective measures
3. Facilities setup
4. Patient assessment, clinical history, education and care
5. Imaging

6. Radiation protection

Course Additions

III. Clinical Competency

Student Learning Outcomes:

In the clinical education setting, given the necessary equipment, simulated patient, or patient, demonstrate:

1. Execute medical imaging procedures under the appropriate level of supervision.
2. Adhere to team practice concepts that focus on organizational theories, roles of team members, and conflict resolution.
3. Adapt to changes and varying clinical situations.
4. Provide patient-centered, clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity, or culture.
5. Integrate the use of appropriate and effective written, oral, and nonverbal communication with patients, the public, and members of the health care team in the clinical setting.
6. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients.
7. Assess the patient and record clinical history.
8. Integrate the radiographer's practice standards into clinical practice setting.
9. Adhere to national, institutional, and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors.
10. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible.
11. Critique images for appropriate anatomy, image quality, and patient identification.
12. Determine corrective measures to improve inadequate images.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 331

Credit Hours 2

Course Title: Radiographic Anatomy and Positioning II

Abbreviated Title: Rad Anat & Pos II

Contact hours per week: Lecture 2 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 1500 Student preparation minutes: 3000

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

Intended semester to offer course 1st time: Spring 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor Science in Radiologic Sciences

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:

Continuation of RADS 321 with instruction in every phase of radiography of the spinal column, digestive system, urinary system, cranium, and facial bones. Radiographic anatomy, positioning, and procedures are discussed and applied in the energized laboratory.

Justification:

This is an existing course in the current Bachelor of Applied Science in Radiologic Technology program that will also be offered in the new Bachelor Science in Radiologic Sciences.

Topical course outline:

- I. Spinal Column
- II. Digestive and Urinary Systems
- III. Cranium and Facial Bones
- IV. General Consideration
- V. Patient Considerations
- VI. Positioning Considerations for Routine Radiographic and Fluoroscopic Procedures
- VII. Procedural Considerations for Contrast Studies

Student Learning Outcomes:

1. Identify and locate bones and bony processes and depression of the appendicular skeleton.
2. Describe articulations of the axial skeleton.
3. Differentiate the primary and secondary curves of the spine.
4. Describe the composition and characteristics of the primary organs of the digestive system.

Course Additions

5. Differentiate between the layers of tissue that comprise the esophagus, stomach, small intestine, large intestine, and rectum.
6. Describe the composition and characteristics of the primary organs of the urinary system.
7. Explain radiographic and fluoroscopic procedures to patients and family members.
8. Adapt general procedural considerations to specific clinical settings.
9. Adapt radiographic and fluoroscopic procedures for special considerations.
10. Explain the patient preparation necessary for various contrast and special studies.
11. Name the type, dosage and route of administration of contrast media commonly used to perform radiographic contrast and special studies.
12. Explain the routine and special positions and projections for radiographic and fluoroscopic procedures.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 331L

Credit Hours 1

Course Title: Radiographic Anatomy and Positioning II Lab

Abbreviated Title: Rad Anat & Pos II 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: Spring 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Bachelor of Science in Radiologic Sciences

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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:

Continuation of RADS 321 with instruction in every phase of radiography of the spinal column, digestive system, urinary system, cranium, and facial bones. Radiographic anatomy, positioning, and procedures are discussed and applied in the energized laboratory.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Identify Anatomy on Radiographic Images
- II. Identify Related Pathology on Radiographic Images
- III. Evaluate Radiographic Images for Quality
- IV. Perform Simulated Positioning Procedures

Student Learning Outcomes:

1. Identify the structures demonstrated on routine radiographic and fluoroscopic images.
2. Identify common pathological process demonstrated on routine radiographic and fluoroscopic images.
3. Evaluate images for positioning, centering, appropriate anatomy and overall image quality.
4. Simulate radiographic and fluoroscopic procedures on a person or phantom in a laboratory setting.
5. Demonstrate proper use of positioning aids.
6. Apply general radiation safety and protection practices associated with radiographic and fluoroscopic

Course Additions

examinations.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 332 Credit Hours 2

Course Title: Specialized Imaging

Abbreviated Title: Specialized Imaging

Contact hours per week: Lecture 2 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 1500 Student preparation minutes: 3000

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

Intended semester to offer course 1st time: Spring 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 medical imaging modalities and treatment, including equipment, dose differences, types of radiation, patient preparations, indications, and contraindications. Educational and certification requirements are included. Mobile and trauma radiography also are discussed. The course includes an introduction to sectional anatomy of head/brain, chest, mediastinum, abdomen, pelvis, and musculoskeletal system.

Justification:

This is a new course offering. This course is being added due to advancements in technology and recommendations from professional organizations.

Topical course outline:

- I. Purpose, principles and equipment of medical imaging modalities in radiology
- II. Procedures and indications for the medical imaging modalities
- III. Educational and certification requirements
- IV. Mobile radiography
- V. Trauma radiography
- VI. Introduction to sectional anatomy

Student Learning Outcomes:

1. Review principles of imaging for imaging modalities using relevant terminology.
2. Compare imaging modalities in application and procedures for pathologic indications.
3. Differentiate between types of radiation and patient dosimetry specific to the imaging modality.
4. Differentiate images produced by different modalities.

Course Additions

5. Explain educational and certification requirements.
6. Modify procedures for mobile and trauma applications.
7. Identify gross anatomical structures on axial (transverse), sagittal, coronal, and orthogonal (oblique) planes.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 333

Credit Hours 2

Course Title: Imaging Equipment and Quality Assurance

Abbreviated Title: Imaging Equip and QA

Contact hours per week: Lecture 2 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 1500 Student preparation minutes: 3000

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

Intended semester to offer course 1st time: Spring 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 radiographic, fluoroscopic, and mobile equipment requirements and design. Applied practice of equipment maintenance, quality control, and testing performed in lab.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Electricity
- II. Magnetism and electromagnetism
- III. X-ray circuit
- IV. Imaging systems
- V. Quality Control

Student Learning Outcomes:

1. Discuss basic electrical quantities
2. Differentiate characteristics of direct and alternating current.
3. Discuss basic principles of magnetism and electromagnetism.
4. Explain structure, function and basic components of x-ray imaging systems.
5. Explain structure, function and basic components of mobile equipment, image-intensified, and flat panel fluoroscopy.

Course Additions

6. Discuss quality control (QC) for imaging equipment and accessories.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 333L

Credit Hours 1

Course Title: Imaging Equipment and Quality Assurance Lab

Abbreviated Title: Imaging Equip and QA 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: Spring 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 radiographic, fluoroscopic, and mobile equipment requirements and design. Applied practice of equipment maintenance, quality control, and testing performed in lab.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Radiography quality aspects
- II. Quality control for imaging equipment and accessories
- III. Evaluation and interpretation of the results
- IV. Preventive and corrective maintenance
- V. Repeat/reject analysis
- VI. Schedules and responsibilities

Student Learning Outcomes:

1. Explain quality aspects in a radiology department.
2. Discuss quality control (QC) for imaging equipment and accessories.
3. Describe energized x-ray equipment quality testing.
4. Evaluate the results of standard QC tests.
5. Explain repeat/reject analysis.

Discussions with affected departments:

None

Course Additions

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 334 Credit Hours 2

Course Title: Image Analysis I

Abbreviated Title: Image Analysis I

Contact hours per week: Lecture 2 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 1500 Student preparation minutes: 3000

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

Intended semester to offer course 1st time: Spring 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Radiologic Sciences

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:

Principles of analyzing radiographic images of the appendicular skeleton, chest, and abdomen. The importance of optimal imaging standards, as well as discussion of a problem-solving technique for image evaluation and the factors that can affect image quality are also addressed. Actual images will be included for analysis.

Justification:

This is an existing course. The credit hours have been increased from 1 to 2 credits due to feedback from students and the advisory board that this critical content needed more emphasis. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Image Appearance Standards
- II. Imaging Standards
- III. Image Appearance Characteristics
- IV. Procedural Factors
- V. Corrective Action

Student Learning Outcomes:

1. Discuss the elements of a radiographic image.
2. Apply a problem-solving process used for image analysis.
3. Differentiate between technical factor problems, procedural factor problems, and equipment malfunctions.
4. Critique images for appropriate technical, procedural, and pathologic factors and employ corrective

Course Additions

actions if necessary.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 335

Credit Hours 2

Course Title: Radiation Biology and Protection

Abbreviated Title: Rad Biol and Protection

Contact hours per week: Lecture 2 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 1500 Student preparation minutes: 3000

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

Intended semester to offer course 1st time: Spring 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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:

Principles of radiation interaction in cells and factors affecting cell response to radiation. The course also addresses acute and chronic effects of radiation, dose equivalent limits, and regulatory involvement.

Responsibility by the radiographer to patients, personnel, the public, and self are also discussed.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Basic cellular biology
- II. Types of ionizing radiation
- III. Sources of radiation exposure
- IV. Radiation energy transfer
- V. Radiation Effects
- VI. Radiosensitivity and response
- VII. Units, detection and measurement
- VIII. Surveys, regulatory/advisory agencies and regulations
- IX. Personnel Monitoring
- X. Application
- XI. Patient Protection

Student Learning Outcomes:

1. Discuss principles of cellular biology.

Course Additions

2. Describe radiation energy transfer.
3. Differentiate between radiation effects on subcellular, cellular, and individual levels.
4. Describe radiosensitivity and identify methods to measure response to radiation.
5. Explain radiation units, detection and measurement.
6. Identify regulatory/advisory agencies and regulations on radiation protection and discuss their application.
7. Discuss personnel monitoring and patient protection.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 339

Credit Hours 4

Course Title: Radiographic Clinical Experience II

Abbreviated Title: Rad Clinical Exp. II

Contact hours per week: Lecture Lab 12 Field Studio Other

Type of Instructional Activity: Laboratory: Academic/Clinical

Academic engagement minutes: 9000 Student preparation minutes: 4500

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

Intended semester to offer course 1st time: Spring 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 additional concepts correlating skills with academic courses in radiographic clinical education. Designed to provide patient care and assessment, competent performance of radiologic imaging, and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during, and following the radiologic procedure.

Justification:

This is an existing course. The credit hours remain the same. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

I. Clinical Practice

1. Code of ethics and professional behavior
2. Professional communication
3. Values
4. Culture, ethnicity and diversity

II. Procedural Performance

1. Scheduling and sequencing of exams
2. Order/requisition evaluation and corrective measures
3. Facilities setup
4. Patient assessment, clinical history, education and care
5. Imaging
6. Radiation protection

III. Clinical Competency

Course Additions

Student Learning Outcomes:

In the clinical education setting, given the necessary equipment, simulated patient, or patient, demonstrate:

1. Execute medical imaging procedures under the appropriate level of supervision.
2. Adhere to team practice concepts that focus on organizational theories, roles of team members, and conflict resolution.
3. Adapt to changes and varying clinical situations.
4. Provide patient-centered, clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity, or culture.
5. Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical setting.
6. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients.
7. Assess the patient and record clinical history.
8. Integrate the radiographer's practice standards into clinical practice setting.
9. Adhere to national, institutional, and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors.
10. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible.
11. Critique images for appropriate anatomy, image quality and patient identification.
12. Determine corrective measures to improve inadequate images.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 354 Credit Hours 2

Course Title: Image Analysis II

Abbreviated Title: Image Analysis II

Contact hours per week: Lecture 2 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 1500 Student preparation minutes: 3000

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

Intended semester to offer course 1st time: Fall 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Bachelor of Science in Radiologic Sciences

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:

Principles of analyzing radiographic images of the axial skeleton (including the spine, sternum, ribs, and cranium), facial bones, paranasal sinuses and the digestive system. The importance of optimal imaging standards, as well as discussion of a problem-solving technique for image evaluation and the factors that can affect image quality are also addressed. Actual images will be included for analysis.

Justification:

This is an existing course. The credit hours have been increased from 1 to 2 credits due to feedback from students and the advisory board that this critical content needed more emphasis. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Image Appearance Standards
- II. Imaging Standards
- III. Image Appearance Characteristics
- IV. Procedural Factors
- V. Corrective Action

Student Learning Outcomes:

1. Discuss the elements of a radiographic image.
2. Apply a problem-solving process used for image analysis.
3. Differentiate between technical factor problems, procedural factor problems, and equipment malfunctions.
4. Critique images for appropriate technical, procedural and pathologic factors, and employ corrective

Course Additions

actions if necessary.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 449

Credit Hours 6

Course Title: Radiographic Clinical Experience III

Abbreviated Title: Rad Clinical Exp. III

Contact hours per week: Lecture Lab 18 Field Studio Other

Type of Instructional Activity: Laboratory: Academic/Clinical

Academic engagement minutes: 13500 Student preparation minutes: 6750

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

Intended semester to offer course 1st time: Summer 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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:

Further exploration of clinical education. Designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during, and following the radiologic procedure.

Justification:

This is an existing course. The credit hours remain the same. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

I. Clinical Practice

1. Code of ethics and professional behavior
2. Professional communication
3. Values
4. Culture, ethnicity and diversity

II. Procedural Performance

1. Scheduling and sequencing of exams
2. Order/requisition evaluation and corrective measures
3. Facilities setup
4. Patient assessment, clinical history, education and care
5. Imaging
6. Radiation protection

III. Clinical Competency

Course Additions

Student Learning Outcomes:

In the clinical education setting, given the necessary equipment, simulated patient, or patient, demonstrate:

1. Execute medical imaging procedures under the appropriate level of supervision.
2. Adhere to team practice concepts that focus on organizational theories, roles of team members, and conflict resolution.
3. Adapt to changes and varying clinical situations.
4. Provide patient-centered, clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture.
5. Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical setting.
6. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients.
7. Assess the patient and record clinical history.
8. Integrate the radiographer's practice standards into clinical practice setting.
9. Adhere to national, institutional, and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors.
10. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible.
11. Critique images for appropriate anatomy, image quality and patient identification.
12. Determine corrective measures to improve inadequate images.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 451

Credit Hours 3

Course Title: Imaging Pathology

Abbreviated Title: Imaging Patho

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 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 concepts related to the disease process with emphasis on the radiographic appearance of disease.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Definitions/Terminology
- II. Causes of Disease (Process, Examples)
- III. Radiologic Pathology (Definitions, Etiology, Examples, Sites, Complications, Prognosis, Radiographic Appearance, Procedural and Technical Considerations, Appropriate Imaging Modality)

Student Learning Outcomes:

1. Define basic terms related to pathology.
2. Describe basic manifestations of pathological conditions and relevance to radiologic procedures.
3. Describe various systemic classifications of disease in terms of etiology, types, common sites, complications and prognosis.
4. Describe the radiographic appearance of diseases.
5. Identify imaging procedures and interventional techniques appropriate for diseases common to each body system.
6. Identify diseases caused by or connected to genetic factors
7. Differentiate images produced by various modalities.

Course Additions

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 452 Credit Hours 3

Course Title: Sectional Anatomy

Abbreviated Title: Sectional Anatomy

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 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the BS or BAS Radiologic Sciences programs

Prerequisite for other course(s): Yes No

Co-requisites: Yes No

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

Health Sciences BAS, Radiologic Technology: 3621

Course is a requirement for a new program:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 location and identification of structures in multiple anatomical planes. Function, orientation, imaging, and pathology will be discussed.

Justification:

This is an existing course in the current Bachelor of Applied Science in Radiologic Technology program that will also be offered in the new Bachelor Science in Radiologic Sciences.

Topical course outline:

- I. Principals of multiplanar imaging
- II. Head and Brain
- III. Neck
- IV. Chest and Mediastinum
- V. Abdomen
- VI. Pelvis
- VII. Extremities

Student Learning Outcomes:

- o Characterize normal anatomical structures in the axial, coronal, sagittal, and oblique cross-sectional imaging planes.
- o Correlate anatomical structures with their physiological functions.
- o Analyze the physical relationships between anatomical structures.
- o Differentiate images by modality of acquisition.

Course Additions

- o Detect abnormal structures and pathologies on multiplanar images.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 453

Credit Hours 3

Course Title: Advanced Patient Care

Abbreviated Title: Advanced Patient Care

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 2017

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the BS or BAS Radiologic Sciences programs

Prerequisite for other course(s): Yes No

Co-requisites: Yes No

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

Health Sciences BAS, Radiologic Technology: 3621

Course is a requirement for a new program:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 patient care knowledge and skills required for advanced medical imaging procedures. Focus is on legal and ethical considerations, drug administration, patient monitoring, emergency care, and sterile technique.

Justification:

This is an existing course in the current Bachelor of Applied Science in Radiologic Technology program that will also be offered in the new Bachelor Science in Radiologic Sciences.

Topical course outline:

- I. Legal and Ethical Issues
- II. Pharmacology
- III. Patient Monitoring
- IV. Emergency Care
- V. Sterile technique

Student Learning Outcomes:

- o Relate legal and ethical issues to medical imaging.
- o Relate pharmacology concepts to medical imaging.
- o Assess life-threatening patient conditions and select appropriate emergency care.
- o Interpret patient physiologic monitoring values relevant to medical imaging.
- o Apply sterile technique and isolation procedures to medical imaging.

Discussions with affected departments:

Course Additions

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 459

Credit Hours 5

Course Title: Radiographic Clinical Experience IV

Abbreviated Title: Rad Clinical Exp. IV

Contact hours per week: Lecture Lab 15 Field Studio Other

Type of Instructional Activity: Laboratory: Academic/Clinical

Academic engagement minutes: 11250 Student preparation minutes: 5625

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

Intended semester to offer course 1st time: Fall 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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:

Further exploration of clinical education. Designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during, and following the radiologic procedure.

Justification:

This is an existing course. The credit hours were reduced from 8 to 5 credits. With changes to the structure of the program that were not previously possible, students will be able to be in clinical settings with fewer other students. This will allow students to have a better overall clinical experience. Additionally, there is increased demand for more didactic content. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

I. Clinical Practice

1. Code of ethics and professional behavior
2. Professional communication
3. Values
4. Culture, ethnicity and diversity

II. Procedural Performance

1. Scheduling and sequencing of exams
2. Order/requisition evaluation and corrective measures
3. Facilities setup

4. Patient assessment, clinical history, education and care

Course Additions

- 5. Imaging
- 6. Radiation protection
- III. Clinical Competency

Student Learning Outcomes:

In the clinical education setting, given the necessary equipment, simulated patient, or patient, demonstrate:

1. Execute medical imaging procedures under the appropriate level of supervision.
2. Adhere to team practice concepts that focus on organizational theories, roles of team members, and conflict resolution.
3. Adapt to changes and varying clinical situations.
4. Provide patient-centered, clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity, or culture.
5. Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical setting.
6. Adapt procedures to meet age-specific, disease-specific and cultural needs of patients.
7. Assess the patient and record clinical history.
8. Integrate the radiographer's practice standards into clinical practice setting.
9. Adhere to national, institutional, and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors.
10. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible.
11. Critique images for appropriate anatomy, image quality and patient identification.
12. Determine corrective measures to improve inadequate images.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 461

Credit Hours 2

Course Title: Principles of Computed Tomography

Abbreviated Title: Prin of CT

Contact hours per week: Lecture 2 Lab Field Studio Other

Type of Instructional Activity: Lecture

Academic engagement minutes: 1500 Student preparation minutes: 3000

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

Intended semester to offer course 1st time: Spring 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the BS or BAS Radiologic Sciences programs

Prerequisite for other course(s): Yes No

Co-requisites: Yes No

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

Health Sciences BAS, Radiologic Technology: 3621

Course is a requirement for a new program:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 operation of computed tomography equipment. Includes instrumentation, image display, radiation safety, and contrast media. Does not include clinical experience.

Justification:

This is an existing course in the current Bachelor of Applied Science in Radiologic Technology program that will also be offered in the new Bachelor Science in Radiologic Sciences.

Topical course outline:

- I. System Principles, Operation, and Components
- II. Data Acquisition
- III. Image Display
- IV. Radiation Safety and Dosimetry
- V. Contrast Media

Student Learning Outcomes:

- o Explain radiation physics in computed tomography.
- o Breakdown the essential components of a computed tomography scanner.
- o Analyze the functions of the data acquisition system.
- o Define terms related to computed tomography image display and processing.
- o Assess radiation safety concerns in computed tomography.
- o Discuss the use of contrast media in computed tomography.

Discussions with affected departments:

Course Additions

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 462

Credit Hours 3

Course Title: Leadership and Management

Abbreviated Title: Leadership & Management

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 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the BS or BAS Radiologic Sciences programs

Prerequisite for other course(s): Yes No

Co-requisites: Yes No

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

Health Sciences BAS, Radiologic Technology: 3621

Course is a requirement for a new program:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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:

Identification of skills necessary to work within an effective interdisciplinary health care team. Includes principles of leadership, quality management, and health care law.

Justification:

This is an existing course in the current Bachelor of Applied Science in Radiologic Technology program that will also be offered in the new Bachelor of Science in Radiologic Sciences.

Topical course outline:

I. Leadership

- A. Leadership role
- B. Styles
- C. Communication skills

II. Quality Management

- A. Concepts and principles
- B. Collection and analysis of data
- C. Quality management requirements

III. Health Care Law

- A. Terms and principles
- B. Doctrines and laws
- C. Consent

Student Learning Outcomes:

Course Additions

- o Identify the skills necessary to be an effective team leader.
- o Analyze the benefits of a quality management program to patients and imaging departments.
- o Apply quality management principles to a given scenario.
- o Explain legal terms and principles relevant to medical imaging.
- o Recognize implications of laws to the imaging profession.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 463

Credit Hours 3

Course Title: Information Literacy in Radiologic Sciences

Abbreviated Title: Information Literacy

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 2018

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the BS or BAS Radiologic Sciences program

Prerequisite for other course(s): Yes No

Co-requisites: Yes No

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

Health Sciences BAS, Radiologic Technology: 3621

Course is a requirement for a new program:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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 life-long learning skills necessary to function competently in the continually changing medical imaging environment. Content includes intellectual inquiry, information literacy, and scholarly research methods.

Justification:

This is an existing course in the current Bachelor of Applied Science in Radiologic Technology program that will also be offered in the new Bachelor Science in Radiologic Sciences.

Topical course outline:

- I. Medical Information Retrieval
- II. Analysis of Research Articles
- III. Information Literacy Concepts
- V. Preparing a Research Project
- VI. Research application

Student Learning Outcomes:

- o Use multiple resources to retrieve quality information relevant to specific topics in medical imaging.
- o Assess research articles to determine the accuracy and validity of findings.
- o Integrate information literacy concepts into a research project.
- o Critique research projects to determine appropriateness and usefulness to the profession.
- o Evaluate the importance and limitations of evidence based medicine and clinical practice guidelines.

Discussions with affected departments:

Course Additions

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Additions

RADS 464 Credit Hours 3

Course Title: Senior Capstone

Abbreviated Title: Sen 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: Spring 2019

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science Radiologic Sciences

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:

Synthesis of radiologic science concepts, principles, and procedures. Includes development of resume and interview skills.

Justification:

This is an existing course. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

- I. Radiology Department Administration and Employment-Seeking Skills
- II. Ethical and Behavioral Practices
- III. ARRT Content Specifications
- IV. Reflection

Student Learning Outcomes:

1. Create a resume.
2. Demonstrate interview skills in preparation for employment.
3. Evaluate ethical situations based on the ARRT Standards of Ethics.
4. Synthesize concepts in radiologic sciences related to patient care, safety, image production, and procedures.
5. Summarize the value of reflection as a pathway to professional experience.

Discussions with affected departments:

None

Course Additions

Course Additions

RADS 469

Credit Hours 3

Course Title: Radiographic Clinical Experience V

Abbreviated Title: Rad Clinical Exp. V

Contact hours per week: Lecture Lab 9 Field Studio Other

Type of Instructional Activity: Laboratory: Academic/Clinical

Academic engagement minutes: 6750 Student preparation minutes: 3375

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

Intended semester to offer course 1st time: Spring 2019

Number of times course may be taken for credit: 1

Essential Learning Course: Yes No

Prerequisites: Yes No

Acceptance into the Radiologic Sciences program

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:

Radiologic Sciences - Bachelor of Science in Radiologic Sciences

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:

Further exploration of clinical education. Designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient prior to, during, and following the radiologic procedure.

Justification:

This is an existing course. The credit hours were reduced from 8 to 3 credits. With changes to the structure of the program that were not previously possible, students will be able to be in clinical settings with fewer other students. This will allow students to have a better overall clinical experience. Additionally, there is increased demand for more didactic content. The prefix and course numbers are being changed for the new bachelor of science in radiologic sciences.

Topical course outline:

I. Clinical Practice

1. Code of ethics and professional behavior
2. Professional communication
3. Values
4. Culture, ethnicity and diversity

II. Procedural Performance

1. Scheduling and sequencing of exams
2. Order/requisition evaluation and corrective measures
3. Facilities setup

4. Patient assessment, clinical history, education and care

Course Additions

- 5. Imaging
- 6. Radiation protection
- III. Clinical Competency

Student Learning Outcomes:

In the clinical education setting, given the necessary equipment, simulated patient, or patient, demonstrate:

1. Execute medical imaging procedures under the appropriate level of supervision.
2. Adhere to team practice concepts that focus on organizational theories, roles of team members, and conflict resolution.
3. Adapt to changes and varying clinical situations.
4. Provide patient-centered, clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity, or culture.
5. Integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical setting.
6. Adapt procedures to meet age-specific, disease-specific, and cultural needs of patients.
7. Assess the patient and record clinical history.
8. Integrate the radiographer's practice standards into clinical practice setting.
9. Adhere to national, institutional, and departmental standards, policies and procedures regarding care of patients, providing radiologic procedures and reducing medical errors.
10. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible.
11. Critique images for appropriate anatomy, image quality and patient identification.
12. Determine corrective measures to improve inadequate images.

Discussions with affected departments:

None

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 114

Credit Hours 2

Course Title: Radiographic Clinical Experience I

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

- RTEC 124
- RTEC 214
- RTEC 251
- RTEC 255
- RTEC 261

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

- RTEC 121
- RTEC 121L
- RTEC 122
- RTEC 122L
- RTEC 120
- RTEC 123

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 120

Credit Hours 3

Course Title: Introduction to Radiologic Technology and Patient Care

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 131
RTEC 131L
RTEC 133
RTEC 133L
RTEC 135
RTEC 214
RTEC 251
RTEC 255
RTEC 261

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

RTEC 114
RTEC 121
RTEC 121L
RTEC 122
RTEC 122L
RTEC 123

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 121

Credit Hours 2

Course Title: Radiographic Anatomy and Positioning I

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 131
RTEC 131L
RTEC 133
RTEC 133L
RTEC 135
RTEC 214
RTEC 251
RTEC 255
RTEC 261

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

RTEC 114
RTEC 120
RTEC 121L
RTEC 122
RTEC 122L
RTEC 123

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 121L

Credit Hours 1

Course Title: Radiographic Anatomy and Positioning I Lab

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 131
RTEC 131L
RTEC 133
RTEC 133L
RTEC 135
RTEC 214
RTEC 251
RTEC 255
RTEC 261

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

RTEC 114
RTEC 120
RTEC 121
RTEC 122
RTEC 122L
RTEC 123

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 122

Credit Hours 2

Course Title: Principles of Radiographic Exposure

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 131
RTEC 131L
RTEC 133
RTEC 133L
RTEC 135
RTEC 214
RTEC 251
RTEC 255
RTEC 261

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

RTEC 114
RTEC 120
RTEC 121
RTEC 121L
RTEC 122L
RTEC 123

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 122L

Credit Hours 1

Course Title: Principles of Radiographic Exposure

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 131
RTEC 131L
RTEC 133
RTEC 133L
RTEC 135
RTEC 214
RTEC 251
RTEC 255
RTEC 261

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

RTEC 114
RTEC 120
RTEC 121
RTEC 121L
RTEC 122
RTEC 123

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 123

Credit Hours 2

Course Title: Digital Imaging

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 131
RTEC 131L
RTEC 133
RTEC 133L
RTEC 135
RTEC 214
RTEC 251
RTEC 255
RTEC 261

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

RTEC 114
RTEC 120
RTEC 121
RTEC 121L
RTEC 122
RTEC 122L

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2018

Course Deletions

RTEC 124

Credit Hours 4

Course Title: Radiographic Clinical Experience II

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 214

RTEC 251

RTEC 255

RTEC 261

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

RTEC 131

RTEC 131L

RTEC 133

RTEC 133L

RTEC 135

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 131

Credit Hours 2

Course Title: Radiographic Anatomy and Positioning II

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 251

RTEC 255

RTEC 261

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

RTEC 124

RTEC 131L

RTEC 133

RTEC 133L

RTEC 135

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 131L

Credit Hours 1

Course Title: Radiographic Anatomy and Positioning II Lab

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 251

RTEC 255

RTEC 261

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

RTEC 124

RTEC 131

RTEC 133

RTEC 133L

RTEC 135

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 133

Credit Hours 2

Course Title: Imaging Equipment

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 251

RTEC 255

RTEC 261

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

RTEC 124

RTEC 131

RTEC 131L

RTEC 133L

RTEC 135

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 133L

Credit Hours 1

Course Title: Imaging Equipment Lab

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 251

RTEC 255

RTEC 261

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

RTEC 124

RTEC 131

RTEC 131L

RTEC 133

RTEC 135

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 135

Credit Hours 2

Course Title: Radiation Biology and Protection

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 251

RTEC 255

RTEC 261

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

RTEC 124

RTEC 131

RTEC 131L

RTEC 133

RTEC 133L

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2017

Course Deletions

RTEC 214

Credit Hours 6

Course Title: Radiographic Clinical Experience III

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 224

RTEC 255

RTEC 265

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

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2018

Course Deletions

RTEC 224

Credit Hours

Course Title: Radiographic Clinical Experience IV

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 234

RTEC 261

RTEC 265

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

RTEC 251

RTEC 255

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2018

Course Deletions

RTEC 234

Credit Hours 8

Course Title: Radiographic Clinical Experience V

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

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

RTEC 261

RTEC 265

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2018

Course Deletions

RTEC 251

Credit Hours 3

Course Title: Radiographic Pathology

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 234

RTEC 261

RTEC 265

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

RTEC 224

RTEC 255

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2018

Course Deletions

RTEC 255

Credit Hours 1

Course Title: Radiographic Assessment I

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

RTEC 234

RTEC 261

RTEC 265

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

RTEC 224

RTEC 251

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2018

Course Deletions

RTEC 261

Credit Hours 3

Course Title: Radiographic Review

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

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

RTEC 234

RTEC 265

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2018

Course Deletions

RTEC 265

Credit Hours 1

Course Title: Radiographic Assessment II

Essential Learning Course: Yes No

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

Health Sciences AAS, Radiologic Technology: 1621

Prerequisite for other course(s): Yes No

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

RTEC 234

RTEC 261

Justification:

The associate of applied science in radiologic technology is being replaced with a bachelor of science in radiologic sciences. This course was part of the AAS.

Proposed by: Patti Ward

Expected Implementation: Fall 2018

Department: Health Sciences-Nursing

Course Modifications

NURS 107L

Intended semester to offer modified course for the 1st time: Fall 2017

	Current		Proposed
Course Prefix:	NURS		
Course No.:	107L		
Credit Hours:	2		3
Course Title:	Foundations of Nursing Laboratory		
Contact hours:	Lecture		Lecture
	Lab 4		Lab 6
	Field		Field
	Studio		Studio
	Other		Other
Engage Min.:	3000		4500
Prep Min.:	1500		2250
Times for Credit:	1		1
Requirement or listed choice for any program of study:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Change affects program sheet or grad requirements:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

Health Sciences Tech Cert, Practical Nursing: 1612

Justification:

This class was originally 2 classes. The first class was fundamental skills and the second was IV skills. Since they were being taught together already and given two separate grades it made sense to make it one class with one grade. When this modification was originally taken to curriculum the program sheet indicates the class should be 3 credits however this was not in the curriculum minutes. . We are trying to correct the issue since it was not reflected in the curriculum minutes as being changed.

Topical course outline, current:

Hand washing,
PPE, Sterile Gloves/Field Bed baths/bed making.
Foot, perineal and oral care.
Vital signs
Physical Assessment Medication Administration Urinary Catheters
Enemas Ambulation Oxygenation
Wound Care/Dressing Changes Cultural Diversity

Topical course outline, proposed:

Hand washing,
PPE, Sterile Gloves/Field Bed baths/bed making.
Foot, perineal and oral care.
Vital signs
Physical Assessment Medication Administration Urinary Catheters
Enemas Ambulation Oxygenation
Wound Care/Dressing Changes Cultural Diversity
Initiating and Care of Intravenous Access Devices

Course Modifications

Student Learning Outcomes, current:

NA

Student Learning Outcomes, proposed:

NA

Proposed by: Genell Stites

Expected Implementation: Fall 2017

Department: Physical and Environmental Sciences

Course Modifications

CHEM 321

Intended semester to offer modified course for the 1st time: Fall 2017

	Current	Proposed
Course Prefix:	CHEM	
Course No.:	321	
Credit Hours:	3	
Course Title:	Physical Chemistry I	
Times for Credit:	1	1
Prerequisites:		

Current: CHEM 132 and MATH 152, and either PHYS 112 or PHYS 132

Proposed: CHEM 132 or CHEM 151, and MATH 152, and PHYS 111 or PHYS 131

Description for catalog:

Current: Application of methods of physics to chemistry. Study of equilibrium properties of bulk matter, quantum theory with applications to molecular structure. Statistical mechanics used to understand the microscopic origin of thermodynamic laws. Calculations of macroscopic thermodynamic properties made from molecular properties. Connection made in kinetics between thermodynamics, quantum theory and statistical mechanics for study of time-dependent processes.

Proposed: Principles of chemical thermodynamics and kinetics. Includes study of the kinetic theory of matter, first and second laws of thermodynamics, state functions, thermochemistry, entropy, free energy, chemical potential, phase transitions, chemical equilibria, and the rates and mechanisms of chemical reactions.

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

Change affects program sheet or grad requirements: Yes No

Justification:

- The course description is from an older time and is identical to the description for CHEM 322 (Physical Chemistry II). This older description reflects topics that are covered in either CHEM 321 or 322. We clarify in this description what topics are in CHEM 321.

- Prereqs: The second semester of physics, PHYS 112 or 132, is not used by this course, so having PHYS 111 or 131 is more appropriate. CHEM 151 is being offered as an alternative prerequisite to CHEM 132 so that students taking the engineering chemistry track may take CHEM 321. Students cover enough prerequisite topics in CHEM 151 so that they do not have to take CHEM 132 before taking CHEM 321.

Student Learning Outcomes, current:

1. Apply the kinetic theory of gases to ideas surrounding collisions and kinetics;
2. Perform calculations relating rates and concentrations of substances in a chemical reaction;
3. Analyze a reaction mechanism and determine the observed rate law;
4. Analyze a thermodynamic process to calculate or describe heat, work, and changes in state variables that occur in the process;
5. Use chemical potential to analyze phase and chemical equilibria.

Student Learning Outcomes, proposed:

Discussions with affected departments:

- Tim Brower from Engineering asked us if the change of prerequisites was possible (email dated 14 Nov

Course Modifications

2016)

Proposed by: James Ayers

Expected Implementation: Fall 2017

Course Modifications

CHEM 322

Intended semester to offer modified course for the 1st time: Fall 2017

	Current	Proposed
Course Prefix:	CHEM	
Course No.:	322	
Credit Hours:	3	
Course Title:	Physical Chemistry II	
Times for Credit:	1	1
Prerequisites:		

Current: CHEM 132 and MATH 152, and either PHYS 112 or PHYS 132

Proposed: CHEM 132 or CHEM 151, and MATH 253 (may be taken concurrently), and PHYS 111 or PHYS 131

Description for catalog:

Current: Application of methods of physics to chemistry. Study of equilibrium properties of bulk matter, quantum theory with applications to molecular structure. Statistical mechanics used to understand the microscopic origin of thermodynamic laws. Calculations of macroscopic thermodynamic properties made from molecular properties. Connection made in kinetics between thermodynamics, quantum theory and statistical mechanics for study of time-dependent processes.

Proposed: An introduction to the quantum theory of atoms, molecules, and chemical bonding for chemists. Includes principles of quantum mechanics and their application to atomic structure, molecular spectroscopy, symmetry properties, and the determination of molecular structure. Also introduces the principles of statistical mechanics with application to molecules.

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

Change affects program sheet or grad requirements: Yes No

Justification:

- The course description is from an older time and is identical to the description for CHEM 321 (Physical Chemistry 2I). This older description reflects topics that are covered in either CHEM 321 or 322. We clarify in this description what topics are in CHEM 322. The topics are also fleshed out somewhat.

- Prereqs: CHEM 151 is being offered as an alternative prerequisite to CHEM 132 as it is proposed to be for CHEM 321. Students with their only chemistry as CHEM 151 have enough chemistry foundation to be successful in this course. We are modifying the mathematics prerequisite to be MATH 253: Calculus III. CHEM 322 uses multivariate calculus. Although we review main points of calculus before the math is used in class, students benefit significantly from having taken Calculus III.

Student Learning Outcomes, current:

1. Define Schrodinger equation, wavefunction, operator, observable, eigenvalue, eigenfunction, and expectation value.
2. Apply quantum mechanics to solve the Schrodinger equation for a particle in a box.
3. Write the Hamiltonian operator for particle in a box, harmonic oscillator, rigid rotator, and simple atoms and molecules.
4. Extract quantitative information from a wavefunction.
5. Apply information gleaned from a wavefunction to spectroscopy.
6. Extract chemical implications from simple quantum mechanical calculations.
7. State the variational principle, and apply it to problems of chemical interest.

Student Learning Outcomes, proposed:

Discussions with affected departments:

Course Modifications

No departments affected. The newly-proposed math prerequisite may appear to cause issues. However, chemistry majors are already required to take MATH 253, and requiring it before (or concurrently) with CHEM 322 should not affect MATH 253 enrollments significantly. Few, if any (<1 per year), students take CHEM 322 who are not chemistry majors.

Proposed by: James Ayers

Expected Implementation: Fall 2017

Course Modifications

ENVS 221L

Intended semester to offer modified course for the 1st time: Spring 2018

	Current	Proposed
Course Prefix:	ENVS	
Course No.:	221L	
Credit Hours:	1	
Course Title:	Science and Technology of Pollution Control Lab	
Times for Credit:	1	1
Prerequisites:		

Current: ENVS 104; mastery of high school algebra; CHEM 121 or 131 recommended

Proposed: ENVS 101 or ENVS 104; mastery of high school algebra; CHEM 121 or 131 recommended

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

Change affects program sheet or grad requirements: Yes No

Justification:

Many of our environmental science majors declare our major after taking ENVS 101, which is an alternative for the required ENVS 104. Adding ENVS 101 as an alternate prerequisite will allow these students to register for ENVS 221 without needing a prerequisite override.

Proposed by: Russ Walker

Expected Implementation: Fall 2017

Course Modifications

ENVS 340

Intended semester to offer modified course for the 1st time: Spring 2018

	Current	Proposed
Course Prefix:	ENVS	
Course No.:	340	
Credit Hours:	3	
Course Title:	Applied Atmospheric Science	
Times for Credit:	1	1
Prerequisites:		
	Current: CHEM 121 or 132	
	Proposed: CHEM 121 or 131	
Requirement or listed choice for any program of study:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Change affects program sheet or grad requirements:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Justification:

Experience has shown that CHEM 121 or 131 is adequate as a prerequisite; CHEM 132 is not necessary.

Proposed by: Russ Walker

Expected Implementation: Fall 2017

Course Modifications

ENVS 420

Intended semester to offer modified course for the 1st time: Spring 2018

	Current	Proposed
Course Prefix:	ENVS	
Course No.:	420	
Credit Hours:	3	
Course Title:	Pollution Monitoring and Investigation	
Times for Credit:	1	1

Prerequisites:

Current: CHEM 122 or 132, STAT 200 or consent of instructor

Proposed: CHEM 121 or 131, and STAT 200; ENVS 221/221L recommended

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

Change affects program sheet or grad requirements: Yes No

Justification:

We stopped requiring our students to take CHEM 122 several years ago. Experience has shown that CHEM 121 or 131 are suitable chemistry prerequisites. Most students will fare better if they have taken ENVS 221/221L, which serves as an introduction to the more in-depth coverage within ENVS 420.

Proposed by: Russ Walker

Expected Implementation: Fall 2017

Course Modifications

ENVS 420L

Intended semester to offer modified course for the 1st time: Spring 2018

	Current	Proposed
Course Prefix:	ENVS	
Course No.:	420L	
Credit Hours:	1	
Course Title:	Pollution Monitoring and Investigation Laboratory	
Times for Credit:	1	1

Prerequisites:

Current: CHEM 121 or 131, and STAT 200, ENVS 221, and ENVS 221L

Proposed: CHEM 121 or 131, and STAT 200; ENVS 221/221L recommended

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

Change affects program sheet or grad requirements: Yes No

Justification:

The prerequisites for this lab course are being modified to match the prerequisites for the lecture section.

Proposed by: Russ Walker

Expected Implementation: Fall 2017

Program Modification

Environmental Science and Technology: 3443

Degree Type: BS

Revision to program sheet: Yes No

Description of modification:

Currently we require all of our Environmental Science majors to take either MATH 146 Calculus for Biological Sciences or MATH 151 Calculus I. We propose to allow ENVS 475 Experimental Design and Statistical Analysis in Environmental Science as a third option.

Justification:

Statistics are used much more frequently than calculus in Environmental Science. ENVS 475 focuses on the statistical methods and applications that are most important in our discipline. We want to leave MATH 146 and MATH 151 as options to accommodate those students who may have a special interest in Calculus for Biological Sciences or who want to take Calculus I to meet a graduate school admission requirement.

Revision to SLOs: Yes No

Other changes: Yes No

Discussions with affected departments:

Discussed the change on December 5, 2016 with Dr. Lori Payne, CSMS department head. She agreed with the change.

Proposed by: Russ Walker

Director of Teacher Education Signature:

Expected Implementation: Fall 2017

Department: WCCC-Office Administration

Course Deletions

OFAD 101 Credit Hours 3

Course Title: Office Bookkeeping

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 105 Credit Hours 3

Course Title: Ten Key

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 120

Credit Hours 3

Course Title: Internet and social networking

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC AA, Liberal Arts-Admin Office Tech: 2334

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 125

Credit Hours 3

Course Title: Multimedia and web editing

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC AA, Liberal Arts-Admin Office Tech: 2334

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 147

Credit Hours 3

Course Title: Introduction to Personal Computer

Essential Learning Course: Yes No

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

WCCC AAS, Medical Office Assistant: 1396

Prerequisite for other course(s): Yes No

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

Justification:

Updating the program to meet the current standards in Colorado Community College numbering System.

Proposed by: Christine Murphy

Expected Implementation: Fall 2018

Course Deletions

OFAD 153

Credit Hours 3

Course Title: Word Processing I

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC AA, Liberal Arts-Admin Office Tech: 2334

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 201

Credit Hours 3

Course Title: Office procedures

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC AA, Liberal Arts-Admin Office Tech: 2334

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 202

Credit Hours 3

Course Title: Records Management

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC AA, Liberal Arts-Admin Office Tech: 2334

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 206

Credit Hours 3

Course Title: Computerized Bookkeeping

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 208

Credit Hours 3

Course Title: Spreadsheets

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC AA, Liberal Arts-Admin Office Tech: 2334

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 221

Credit Hours 3

Course Title: Transcription Machines

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC AA, Liberal Arts-Admin Office Tech: 2334

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 267

Credit Hours 3

Course Title: Presentation, Publishing, and Desk Top Management

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 269

Credit Hours 3

Course Title: Complete PC Database

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

WCCC AA, Liberal Arts-Admin Office Tech: 2334

WCCC Tech Cert (A-M), Admin Office Techn-General Office Administration: 1356

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Course Deletions

OFAD 291

Credit Hours 3

Course Title: Service Learning

Essential Learning Course: Yes No

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

WCCC AAS, Admin Office Tech-Administrative Professional: 1395

Prerequisite for other course(s): Yes No

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

Justification:

The OFAD program is being replaced by a new program that is more up-to-date with the current work force needs

Proposed by: Tyler Liff

Expected Implementation: Fall 2017

Program Deletion

Department: WCCC-Office Administration
Degree Type: AA
Program: Liberal Arts-Admin Office Tech: 2334

Justification:

This program is being replaced by the Applied Business program, which is more up-to-date with the current work force needs.

Teach-out Plan:

Degree: Associate of Arts
Major: Liberal Arts
Emphasis: Administrative Office Technology
Sub

ACCT 201 Principles of Financial Acct ACCT 201 Principles of Financial Acct
BUGB 211 Business Communications BUGB 211 Business Communications
CISB 101 Business Info Technology CISB 101 Business Info Technology
MANG 201 Principles of Management MANG 201 Principles of Management
OFAD 153 Word Processing ABUS 257 Managing Office Technology I
OFAD 201 Office Procedures ABUS 156 Problem Solving-Bus Environment
OFAD 202 Records Management ABUS 200 Business rules and regulations
ELECTIVES
OFAD 120 Internet and Social Networking ABUS 155 Social media for business
OFAD 125 Multimedia and Web Editing CSCI 106 Web design I
OFAD 221 Voice Recognition and Business Editing ABUS 116 Principles of Supervision
OFAD 269 Complete PC Database ABUS 145 Data Mangament (Access)
OFAD 208 Spreadsheets ABUS 258 Managing Office Technology II

Term and year in which all students will have completed: spring 2018

Year to reexamine program's status: 2018

Proposed by: Tyler Liff

Director of Teacher Education Signature:

Program Deletion

Department: WCCC-Office Administration

Degree Type: AAS

Program: Admin Office Tech-Administrative Professional: 1395

Justification:

This program is being replaced by the Applied Business program, which is more up-to-date with the current work force needs.

Teach-out Plan:

Students will have until Spring of 2018 to finish their current program. Here is a list of class substitutions:

Degree: Associate of Applied Science

Major: Administrative Office Technology

Emphasis: Administrative Professional

Sub

BUGB 211 Business Communications BUGB 211 Business Communications

OFAD 221 Voice Recognition and Business Editing ABUS 156 Problem Solving-Bus Environment

OFAD 101 Office Bookkeeping ABUS 101 Budget analysis

OFAD 105 Ten Key ABUS 128 Workplace Behavior

OFAD 153 Word Processing ABUS 257 Managing Office Technology I

OFAD 206 Computerized Bookkeeping ACCT 201 Principles of Accounting

OFAD 269 Complete PC Database ABUS 145 Data Mangament (Access)

OFAD 201 Office Procedures ABUS 116 Principles of Supervision

OFAD 202 Records Management ABUS 200 Business rules and regulations

OFAD 125 Multimedia and Web Editing CSCI 106 Web design I

OFAD 291 Service Learning OFAD 291 Service Learning

OFAD 208 Spreadsheets ABUS 258 Managing Office Technology II

OFAD 267 Presentation, Publishing & Desktop ABUS 289 Capstone

OFAD 120 Internet and Social Networking ABUS 155 Social media for business

MGDA 111 Digital Image Editing MGDA 112 Digital Design Tools

MGDA 112 Adobe Illustrator I ABUS 114 Digital Layout

Term and year in which all students will have completed: spring 2018

Year to reexamine program's status: 2018

Proposed by: Tyler Liff

Director of Teacher Education Signature:

Program Deletion

Department: WCCC-Office Administration

Degree Type: Tech Cert

Program: Admin Office Techn-General Office Administration: 1356

Justification:

This program is being replaced by the Applied Business program, which is more up-to-date with the current work force needs.

Teach-out Plan:

Award: Technical Certificate

Program of Study: Administrative Office Technology

Specialization: General Office Administration

Sub

OFAD 101 Office Bookkeeping	ABUS 101 Budget analysis
OFAD 105 Ten Key	ABUS 128 Workplace Behavior
OFAD 153 Word Processing	ABUS 257 Managing Office Technology I
OFAD 201 Office Procedures	ABUS 116 Problem Solving-Bus Environment
OFAD 202 Records Management	ABUS 200 Business rules and regulations
OFAD 206 Computerized Bookkeeping	ACCT 201 Principles of Accounting
OFAD 267 Presentation, Publishing & Desktop	ABUS 289 Capstone
OFAD 269 Complete PC Database	ABUS 145 Data Mangament (Access)

Electives

OFAD 120 Internet and Social Networking	ABUS 155 Social media for business
OFAD 125 Multimedia and Web Editing	CSCI 106 Web design I
OFAD 221 Voice Recognition and Business Editing	ABUS 156 Principles of Supervision

Term and year in which all students will have completed: spring 2018

Year to reexamine program's status: 2018

Proposed by: Tyler Liff

Director of Teacher Education Signature:
