CMU Academic Affairs Council
Summary September 5, 2018
3:00-5:00 p.m. EH 101

AA Council Members in Attendance:
Dr. Kurt Haas - Acting VPAA; Professor Tim Pinnow - Sr. VP Strategic Initiatives, Dir. of Graduate Studies & Distance Education; Dr. Aparna Palmer - AVPAA for Student & Faculty Success; Dr. Morgan Bridge - AVPAA, Dir. of Assessment & Accreditation; Dr. Blake Bickham - Dept. Head, Teacher Education; Dr. Jeremy Hawkins - Dept. Head, Kinesiology; Dr. Jessica Herrick - Dept. Head, SBS; Dr. Calvin Hofer – Dept. Head, Music; Dr. Scott Kessler - Dept. Head, Engineering; Dr. Barry Laga - Dept. Head, LLMC; Ben Reigel for Mo LaMee – Dept. Head, Theatre; Dr. Carrie McVean - Dept. Head, Biological Sciences; Ms. Millie Moland - Dir. of Academic Services; Dr. Steve Norman - Dept. Head, Business; Dr. Lori Payne - Dept. Head, CSMS; Ms. Sylvia Rael - Director, Tomlinson Library; Dr. Gary Ratcliff - Director, CMU Montrose Center; Dr. Bette Schans - Interim Director, Health Sciences; Ms. Holly Teal - Registrar; Dr. Russ Walker - Dept. Head, PES

Also in attendance: Dr. Cheryl Green, new Director of Sponsored Programs was introduced.

Members excused: Ms. Suzie Garner – Dept. Head, Art and Design

I. Updates
   A. Parent’s Weekend and CMU Scholars.
      Parent’s Weekend (9/21/18), and CMU Scholars Event (10/26/18).
      Erin Rooks has posted the spreadsheet to the R drive folder for DH’s to fill in sections of courses for families to attend. This is for both Parent’s Weekend and the CMU Scholars Event. DH’s should plan on attending the event to mingle with the students and families. Department banners will be on display. More communications will be forthcoming leading up to the event dates.
      R:\Department Heads\Parents Weekend Courses.
   B. New program process, budget work.
      DH’s and their faculty should take a look at the load/budget section of the new program curriculum form about budget and estimated student information, then schedule a conversation with Whitney Sutton/Budget Director early in the new program process. The hope is to help predict budget requests.
   C. Position requests due end of the week, September 7th.
      Dr. Haas will have a conversation with President Foster on position requests by the end of September.
   D. Assessment Reminders, Dr. Morgan Bridge.
      Assessment conversations = “Chocolate”. Dr. Bridge had several reminders to share.
      1.) Please get back to Dr. Bridge with scheduled meetings of DH’s and department’s faculty assessment committee member.
      2.) Daniels Fund email will be in DH’s inbox by end of day. Dr. Bridge will come talk to department’s faculty for further explanation if requested. Dr. Bridge will also discuss the Daniels Fund Initiative at the assessment meetings of DH’s and Department faculty assessment committee member. See attachment A.
      Program Reviews – Dr.s Bridge and Palmer are looking for suggestions on whom to contact as possible external reviewers for each program to be reviewed this AY.
Dr. Bridge also passed out a sample of a survey and requested DH’s take the survey to help determine areas they consider could use improvement within their program. An email will be in their inbox by end of day with the Program Quick Check. Please submit your answers to Dr. Bridge by 5 p.m. on Monday September 10th. There is the possibility of receiving a grant to cover the cost of someone who will help with program improvement. See attachment B.

E. Professional Development Fund deadline September 7, Dr. Palmer.
Deadline for submission is 5 p.m. on Friday, September 7. Dr. Palmer asked DH’s to speak with their new faculty to make sure they are aware of department funds that are available to them. The department amount should be noted in their request under additional funding. Dr. Palmer would like to see increased participation in the 2019 Student Showcase event. Please start looking ahead to spring projects and encourage your faculty to promote this event to their students.

II. Conventions for hiring part-time faculty.
It is preferred that part-time faculty teach 2 courses per semester. The CH may vary by course offering but ideally it is 6 CH’s. Run ads to try and fill if possible. If sudden resignations tap out your pool, then go to higher loads. If you need to have part-time faculty teach more than the recommended 2 courses per semester; send an email to Tim Pinnow, cc Jo, with reasoning why part-time faculty have more than the 2 courses.
- Due to the schedule for pay and the new deadlines for submission of contracts, DH’s are asked to submit contract preps for faculty teaching an online full semester course prior to the release of the capacity/census report. The enrollment may or may not be correct. Once capacity/census report is received, double check what you submitted for that faculty member. If there are to be any adjustments, up or down, send an email to Sr. Vice President Tim Pinnow, Jo Reis and Shannon Pumphrey with the Faculty members name, 700#, course information, and what the actual payment should be. This is only for contracts needing adjustments.

III. Academic program quality and the admissions process, Dr. Carol Futhey, Ms. Sharaya Cowan and Vice President for Information Technology Jeremy Brown.
Dr. Futhey, Ms. Cowan and VP Brown presented information and asked for assistance on Academic Programs, Admissions and the Public. Highlights of the presentation were Faculty involvement with recruitment, use of Recruiter, helping our admissions recruiters become more knowledgeable of what CMU offers in a variety of topics. See attachment C. Information on departments and how we can put more information out to interested/admitted students. See attachment D.

IV. Internship system pilots this Fall and Spring. (Reports on cost of new pay scale for them.) Tabled for a later meeting.

V. Degree Analytics.
Dr. Haas shared that CMU is working with a third party to analyze what is called facilities usage data for purposes of improving retention rates, particularly of on-campus students. This company uses Wi-Fi information to determine whether or not a student’s phone has been in class. It will also produce some broad research information about student engagement that
will inform our choices about retention strategies and intervention resources. **Students have the option to opt out at the beginning of each semester.**

VI. Discussion: Convocation and graduation participation.
   Tabled for a later meeting.

VII. Rolling Summer 2018 schedule into Summer 2019, Holly Teal.
   Summer 2019 will consist of one 8 week session and 2 four week session with in that 8 week period with one week off between spring and summer term. **Full 8 week – May 28th – July 21. First 4 week – May 28 – June 23. Second 4 week – June 24 – July 21.** For a traditional course, please use one of the three parts of term noted. For nontraditional courses, such as 1-2 week courses, ISED, AP program international travel, or other special cases, alternative parts of term may be needed. Please work with Holly Teal or Barbara Crane to discuss options. See attachment E and F for more information.

VIII. Retirement committee recommendations, Laura Glatt.
   Laura Glatt provided a handout on the CMU Retirement Plan changes to be presented to the Board of Trustees at their October meeting. She summarized each page and answered questions. Also in attendance was Jill Knuckles and Kevin Price from Insight Financial Solutions. Insight Financial Solutions has been hired to assist in the transition and offer advice/suggestions to CMU employees. See attachment G.

IX. Change Talk, Morgan Bridge.
   Morgan related a story from “Who Moved My Cheese” by Dr. Spencer Johnson and shared thoughts from the book on peoples approach to change. See attachment H.

**Upcoming Dates and Deadlines**

- September 13 – Posting of classes to be offered for parents to attend during Parents Weekend.
- September 19 – Academic Department Heads, LHH 302 3-5 p.m.
- September 21 – Parents Weekend event
- October 26 – CMU Scholar Event
- **August 8, 2019**—Tentative Academic Affairs retreat
In 2014, The CMU Department of Business was awarded the Daniels Fund Ethics Initiative Grant to be used to accomplish the following:

"The Daniels Fund Ethics Initiative and each of its components extend beyond philosophy and theory to real world, practical application of ethical principles as a framework for personal and organizational decision-making. Our belief is that ethics education must convey that principles are constant foundations — not relative to a specific situation — and that doing what is right prevails over self-interest when the two may appear to be in conflict." www.danielsfund.org/Ethics

The Eight Principles mentioned above are the following:

- **Integrity**: Act with honesty in all situations
- **Trust**: Build trust in all stakeholder relationships
- **Accountability**: Accept responsibility for all decisions
- **Transparency**: Maintain open and truthful communications
- **Fairness**: Engage in fair competition and create equitable and just relationships
- **Respect**: Honor the rights, freedoms, views, and property of others
- **Rule of Law**: Comply with the spirit and intent of laws and regulations
- **Viability**: Create long-term value for all relevant stakeholders

With the integration of the two new CMU SLOs, Ethical Reasoning/Personal and Social Responsibility and Information Literacy fall 2018, we have the opportunity to begin/continue the implementation of these two programmatic CMU SLOs utilizing resources from the above Initiative.

This fall, through the above Grant, there is an opportunity for faculty to implement the eight ethics principles into their coursework/program for their specific discipline, scaffolding that coursework into the overall program SLOs. All proposals must build upon two or more of the above principles as a principle-based ethical framework in which to make decisions, both personally and professionally specific to a discipline. Funding for research and/or publishing is not allowed, per the Grant. All Grant activities must directly (classroom activity) or indirectly (training an Instructor) impact students.

Faculty may receive up to $2000 for any one of the four activities listed below. Funding requests may also include any needed supplies, etc. to implement the activities listed in the proposal. Funds will be paid only upon completion and acceptance of the final report. Payment will be submitted two weeks after the final report is accepted. Proposals will be approved by the Daniels Fund Ethics Initiative Committee. Only proposals focusing on the above principle-based ethics framework will be considered. Social responsibility, sustainability, or social justice activities will not be funded, per the Grant. Full-time tenured and tenure-track faculty will be given first priority with the goal of at least one proposal from each department, also given priority. Part-time faculty and Lecturers may also apply and will be considered based upon funding availability. Special consideration will be given to cross-disciplinary ethics activities.

There are four areas in which a faculty member can participate in the Daniels Fund Ethics Initiative: curriculum development, student engagement, collaborative curriculum development, and/or instructor workshop.
1. Curriculum development: Submit a proposal to add, strengthen, diversify or enhance ethics in a course/program. Opportunities include identifying and/or developing ethics cases, educational games, videos, simulations, learning activities, etc., that can be used in specific courses to address these ethical principles. Special consideration will be given to cross-disciplinary ethics education.

2. Student engagement: Submit a proposal to host/conduct an activity that directly involves students in an ethics activity. Opportunities include ethics competitions, guest speakers, workshops, hands-on club activities, etc. At least 10 students must participate in the event.

3. Submit a proposal from two faculty where due to the magnitude or nature of the project, more than one faculty is needed to implement the proposal. It is possible, if warranted that both faculty members could receive a $2,000 stipend or the $2000 could be split between the two faculty, as determined by the faculty and noted on the application. Please contact mbridge@coloradomesa.edu if you have questions.

4. Develop and offer a workshop for Instructors on how to best utilize/find/implement ethics into their respective courses/programs. At least 10 faculty must participate. Priority will be given to 1. inter-disciplinary workshops involving at least two departments and 2. department specific workshops.

All applications must contain the Proposal Application Page and the first three sections described below. The three sections should be no more than one page each. A budget must also be included. For the Final Report, please include the application page, the first three sections, Section 4 (which must be no more than 2 pages) and the finalized budget. For the final report, an itemized budget of how all funds were actually allocated should be included in addition to the initial application budget. The Application Form is developed so that the Final Report can be completed by simply adding to the original application. Please include all initial materials submitted in the final report and complete by finalizing Sections 1-3, adding section 4 and including a finalized budget.

Section 1 should include the how and why of the project. How will the curriculum/event/workshop impact students and why is that important. Student impact must be addressed.

Section 2 should include a brief overview of the curriculum to be developed/the activity to be used/the workshop to be shared. Additional information may be added in the final report, as needed.

Section 3 should include a section on assessment of the curriculum/event, concluding with a “So What” section. How can you show participants increased their ethical understanding through your activity. How did the participants make progress in achieving the program/CMU SLOs? The assessment can be any measure that demonstrates fulfillment of the above question. This question must be addressed. This curriculum/event should tie to the department programmatic curriculum map.

Section 4 should provide a brief overview of the entire activity, the goal, the outcomes and any materials needed/used/developed to facilitate the activity. For example, the handouts/PowerPoint from a presentation or the classroom activity used in a course should be included. This information must be in a publishable format and will be shared with the Consortium Schools involved in the Daniels Fund Ethics Initiative. While the faculty member will retain the copyright to any materials developed, the materials may be used by CMU and the Daniels Fund Ethics Initiative. The faculty name and activity will also be posted on the Daniels Fund Ethics Initiative CMU website.

Section 5 must provide a budget showing funding needed for the proposal. The Final Report must account for all funds spent in the finalized budget and include the initial budget.

In order for the Proposal to be accepted, the proposal must meet the spirit of the Grant and all Grant criteria, even if not specifically listed in this application. If Proposals are rejected, faculty may work with the Grant Committee to address areas of concern and resubmit. The Grant Committee will be comprised of Mr. Craig Fossett and Dr. Morgan Bridge, CMU Daniels Ethics Fund Initiative and Ms. Tracy Mundy, Sponsored Programs. All proposal applications and/or questions should be submitted to Dr. Morgan Bridge, Assistant Vice President Academic Affairs Assessment and Accreditation at mbridge@coloradomesa.edu or at 970.248.1169.
Name: Click or tap here to enter text.

Department: Choose an item.

Your 700: Click or tap here to enter text.

Type of Activity: Choose an item.

Who will be impacted and the number impacted: Click or tap here to enter text.

Amount of funding requested: Click or tap here to enter text.

If Dual Project, how will funds be allocated between the two faculty: Click or tap here to enter text.

Date Activity will be completed: Click or tap to enter a date.

*Activity must be completed no later than December 13, 2018*

Section 1 Click or tap here to enter text.

Section 2 Click or tap here to enter text.

Section 3 Click or tap here to enter text.

Section 4 Click or tap here to enter text.

Budget: Click or tap here to enter text.
Program Improvement Quick Check September 2018

On the following table, please list each program in your department.

On a scale of 1 to 5, rank where you feel each program is currently in relation to the below areas.
1 represents need assistance ASAP, 3 represents making good progress and 5 represents the program currently needs no help in that area.
For example, a program could have only a single 1 meaning help is needed and four 3s representing progress is occurring in all other areas.

Please return to mbridge@coloradomesa.edu by Monday, September 10, 2018 5 pm.

<table>
<thead>
<tr>
<th>Departmental Program</th>
<th>Person Reporting</th>
<th>Developing and/or working on assignments</th>
<th>Defining Learning Outcomes</th>
<th>Mapping Curriculum Pathways</th>
<th>Working on a plan for assessing and documenting learning outcomes</th>
<th>Implementing a plan for assessing and documenting learning outcomes</th>
<th>Implementing Programmatic Change based upon Data Collection and Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example - BS Sports Management</td>
<td>Jeremy Hawkins</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
Academic Programs, Admissions, and the Public

1. Build on information related to undergraduate (especially baccalaureate) student success, program quality, and faculty accomplishments, such as:
   - Undergraduate research projects;
   - Conference presentations;
   - Competitions (off-campus only), including team placements;
   - Awards;
   - Other types of recognition;
   - Success of alumni;
   - Graduate school success;
   - Pass rates;
   - Program accreditation;
   - Other.

   - Enrollment information from the National Student Clearinghouse will be pre-populated.
   - Share with your faculty to complete as much as possible: Where are they now? What are they doing?

3. Communicating with admitted students about “what’s happening on campus” in their designated major.
   - Examples: Congratulations on admission to CMU; general announcements; invitation to attend an event, etc.
   - Can use CRM Recruit (coordinate with Sharaya).

4. Seeing Is Believing
   a. Piloting focused visit days - proposing:
      - October 6: Arts and Humanities, Business and Teacher Ed, Engineering and Engineering Tech
      - November 3: Health Sciences and Kinesiology, (Math, Computer, Biology, Environmental and Physical Sciences), Social and Behavioral Sciences

   b. Front Range High School Counselor Visit to CMU (November 5 – 7, 2018)
      CMU’s Admissions Office is inviting approximately 30 Front Range high school counselors to visit the campus from mid-afternoon on November 5 (Monday) through mid-morning on November 7 (Wednesday). The purpose of the event is to provide the counselors with an opportunity to
      - learn more about students’ experience as an undergraduate at the University,
      - see examples of student projects (in-progress or completed),
      - hear about how students apply their learning,
      - become informed about student successes in baccalaureate majors,
      - gather information on academic support, facilities, equipment, and other educational support, and
      - gain any other information that each department/program deems relevant.
In short, the campus information and interactions should inform counselors on how students in their respective high school are a good “fit” with CMU, and more specifically, counselors can envision their student as a potential major in your department. Note that a session on academic support also will be included.

Most sessions will be clusters of academic programs (e.g., Mathematics and Sciences will be a combination of CSMS, Biology, and PES). The length of time for each program block will vary according to how many programs are included in a session, and you are encouraged to involve faculty members and students in the session. The number of participating counselors might necessitate dividing into subgroups. Most, though not all, academic groups will be scheduled throughout the day on Tuesday. You will receive a preliminary schedule of the sessions by Thursday, September 27.

Follow-up: Email cfuthey@coloradomesa.edu with a brief sketch out how you plan to structure your session by Thursday, September 20, so we can coordinate with other academic units and possibly divide the counselor group if needed. Once the sessions are outlined, we'll have a brief conference call to solidify how the session is structured and coordinate across departments as relevant. Please schedule whatever room in which you want to meet initially with the group. Consider if you want to walk the counselors through other learning spaces. Provide point of contact information if a counselor wishes to follow-up after visit:

- Department
- Program (if applicable)
- Contact name
- Contact email
- Contact phone number

5. Greater emphasis on transfer
ARTS AND HUMANITIES

Degrees and Awards

Graduate Level
Certificate: Rhetoric and Literary Studies

Undergraduate Level
Bachelor of Arts:
  - English. Concentrations: Literature; Writing; Secondary Education
  - Mass Communication. Concentration: Media Strategies and Applications
  - Music. Concentration: Liberal Arts
  - Spanish. Concentrations: Hispanic Studies; Secondary Education
  - Studio Art.
  - Theatre Arts. Concentrations: Design/Technology; General Theatre

Bachelor of Fine Arts:
  - Animation, Film, Photography, and Motion.
  - Art. Concentrations: Art History, K-12 Teaching; Studio Art
  - Dance.
  - Graphic Design. Concentration: Visual Design

Bachelor of Music:
  - Music. Concentrations: Performance; Elective Studies in Business

Bachelor of Music Education: Music Education (K-12)

Minors:
  - Classical Studies
  - Communication Studies
  - Dance
  - English
  - Graphic Design
  - Jazz Studies
  - Mass Communication
  - Music (Instrumental; Vocal)
  - Philosophy
  - Spanish
  - Studio Art
  - Theatre

Contact Information: Colorado Mesa University, 1100 North Avenue,
  - Department of Art and Design, Fine Arts Building 200, Grand Junction, CO 81501; Phone: 970.248.1883;
    Website: https://www.coloradomesa.edu/art/
  - Department of Languages, Literature, and Mass Communication, Escalante Hall 237, Grand Junction, CO 81501;
    Phone: 970.248.1687; Website: https://www.coloradomesa.edu/languages-literature-mass-communication/
  - Department of Music, Moss Performing Arts Center 141, Grand Junction, CO 81501; Phone: 970.248.1233;
    Website: https://www.coloradomesa.edu/music/
  - Department of Theatre Arts, Moss Performing Arts Center 141, Grand Junction, CO 81501; Phone: 970.248.1233;
    Website: https://www.coloradomesa.edu/theatre/

Some Notable Program Highlights
Colorado Mesa University is accredited by the Higher Learning Commission and National Association of Schools of Music.

For the second year, CMU placed first in the Graphic Design advanced category at The Review, an annual portfolio competition of students from across Colorado that was sponsored by the American Institute of Graphic Arts and The One Club (formerly the Art Directors Club of Denver).

The Art and Design Department offers both the professional B.F.A. degree as well as the B.A. for students seeking a more general exposure to art with technical skills.
Second language course offerings include Spanish, French, Greek, Japanese, Latin, Mandarin, Russian, and American Sign Language.

Theatre Arts' Mesa OutLou!d! is a community outreach and touring ensemble focusing on contemporary commercial music from the American Songbook and Broadway stage to current chart-topping favorites.

Art and Design students can participate in a range of clubs focusing on Animation, Motion, and Photography; Ceramics Club; Printmaking Guild; Mesa Emerging Designers; and Sculpture Guild. English students can join the English Club, and with some experience, be involved with The Literary Review, Pinyon Poetry, and a number of Mass Communication publications.

English faculty members also host a monthly guest-writer/scholar program that few universities of CMU's size offer.

The Graphic Design program has the most extensive course offerings for this major in the state of Colorado.

Recent English internship placements include Lithic Press, the District Attorney's Office, a private law firm, and KAART Group, while Spoke and Blossom, the Grand Junction Rockies, and KUNF Public Radio are among the assignments for Mass Communication majors.

In conjunction with the Office of Student Life, majors in Mass Communication have opportunities for hands-on experience on the student newspaper (The Criterion) and the student radio station (KMSA), while work on literary and art publications is done through the Campus Design Studio.

Majors in Animation, Film, Photography, and Motion Design are traveling to France and Italy, with a trip to Peru (including Machu Picchu) in spring 2019.

The 2018-19 Theatre and Dance season will feature The Pursuit of Happiness: Ends and Means; 1776 — all female version; Clybourne Park — Pulitzer Prize; Reefer Madness — Musical; Macbeth — Classic Shakespearean tragedy; Ends Fall Dance Concert; Means Spring Dance Concert. More than 20 student productions will be presented including: Assassins by Stephen Sondheim, Dog Sees God: Confessions of a Teenage Blockhead, and Bang, Bang, You're Dead by William Mastroisimone.

Some Faculty Accomplishments

Faculty members in the Arts and Humanities have earned degrees from prestigious institutions, such as Carnegie-Mellon University, Indiana University, National Theatre Conservatory, Pennsylvania State University, Purdue University, Smith College, Syracuse University, Texas A & M University, Temple University, University of Arizona, University of California-Los Angeles, University of Denver, University of Florida, University of Illinois, University of Iowa, University of Maryland, University of Nebraska, and University of North Texas. Meet a few of them along with their diverse accomplishments and interesting professional contributions to CMU and their respective disciplines.
Julie Bruch, English, conducted field work in Puerto Rico, Japan, and the United States, comparing communication styles, differing notions of politeness and styles of accommodation to “outsiders” in conversation.

Amanda Benzin and Meredith Lyons, Dance, presented their research at the prestigious international Dance Studies Association conference in Malta.

Joshua Butler, Art, was invited to exhibit his work in *Ink and Stick*, a national drawing exhibition in Lake Charles, Louisiana.

Suzie Garner, Graphic Design, is an Artist in Residence in Yellowstone each summer, teaching sketchbook classes and a course on Art of the American West.

Calvin Hofer, Music, has chaired a multi-year curriculum revision to prepare graduates as 21st century musicians and entrepreneurs, focusing on topics such as career development, entrepreneurial studies in music, creative programming, performing in alternative venues and developing citizen artists.

Barry Laga, English, recently completed *Using Key Passages to Understand Literature*, a textbook published by Routledge that guides students in critical reading.

Maurice LaMee, Theatre Arts, collaborated on *Angry Alan*, an original play by award winning playwright, Penelope Skinner at the 2018 Edinburgh Festival.

Jason Reddoch, English and Classical Studies, was a recent contributor to Latin Translations, Beautiful Mars Project coffee table book entitled *Mars: The Pristine Beauty of the Red Planet*, a collection of the best images from the Beautiful Mars Project with captions in many languages.

Ben Reigel, Theatre Arts, directed and acted in *The Christians* by Lucas Hnath at the Aspen Fringe Festival.

Araan Schmidt, Art, created a sculpture which was showcased at the 7th International Conference on Contemporary Cast Iron Art.

Mayela Vallejos-Ramirez, Spanish, presents research on scholars of Caribbean poetry and has contributed to a book on Medical Spanish.

Bill Wright, English, was recently recognized as a semi-finalist for the Anthony Hecht Poetry Prize, based on a submission of his poetry collection.

Kristen Jeon-Ji Yun, Music, is invited to give a lecture on chamber music, a master class, and a lecture recital at a university in Kuala Lumpur, Malaysia, and perform in another chamber concert in Deciso with internationally-recognized musicians.
Learning Spaces

437CO is CMU's art gallery in downtown Grand Junction, featuring senior student work as well as exhibits by national and international guest artists. On campus, specialized spaces dedicated to the programs in Art and Design include:

- three-dimensional design and sculpture lab;
- wood shop;
- ceramic shell room;
- covered and outdoor bronze foundry and sculpture area;
- photo room;
- ceramics lab;
- CNC studio/shop;
- drawing room;
- painting studio;
- printmaking and two-dimensional design room;
- screen print/exposure room;
- 3D printer studio;
- photography finishing studio;
- animation, film & motion design Mac lab;
- animation studio;
- animation, film & motion design studio;
- audio studio;
- graphic design letterpress studio

Moss Performing Arts Center houses performance venues, classrooms, choral and instrumental rehearsal rooms, scene shop, a costume shop, dance studio, mainstage and experimental theatres, and a recital hall.

Escalante Hall features specialized spaces that include a state-of-the-art television production studio and is also home to KRMJ-TV, the Grand Junction affiliate of Rocky Mountain PBS.

Examples of Employers of Recent CMU Graduates

CBS4 Denver; Central City Opera; Denver Broncos Stampede Band; Disney; Design Rangers; English and Music teachers at more than 30 schools across the state; Fabrica Creative; Federal Communications Commission; freeFall Theatre; Grand Junction Symphony; Hercules Industries; Hope West (Hospice) of Western Colorado; J. G. Management Systems; Jackson Kahn Golf Course Design; JossBecause; KUSA-TV, Denver; Living Ink Technologies; Macmillan Publishing; Minuteman Press; MJ Thomas Photography; PACE Theatre; Public Trust Advisors LLC; Seattle Seahawks; The Greeley Tribune; United States Army School of Music; Western Colorado Center for the Arts.
### BUSINESS ADMINISTRATION

#### Degrees and Awards

<table>
<thead>
<tr>
<th>Graduate Level</th>
<th>Bachelor of Applied Science:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Business Administration</td>
<td>Business Administration</td>
</tr>
<tr>
<td></td>
<td>Computer Information Systems</td>
</tr>
<tr>
<td></td>
<td>Hospitality Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Undergraduate Level</th>
<th>Associate of Arts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Business Administration:</td>
<td>Business Administration</td>
</tr>
<tr>
<td></td>
<td>Business Computer Information Systems</td>
</tr>
<tr>
<td>Business. Concentrations:</td>
<td>Minors:</td>
</tr>
<tr>
<td>Business Analytics; Business</td>
<td>Accounting (General)</td>
</tr>
<tr>
<td>Economics; Emerging Markets;</td>
<td>Business Administration Economics</td>
</tr>
<tr>
<td>Energy Management/Landman;</td>
<td>Computer Information Systems</td>
</tr>
<tr>
<td>Entrepreneurship; Finance;</td>
<td>Entrepreneurship</td>
</tr>
<tr>
<td>Hospitality Management;</td>
<td></td>
</tr>
<tr>
<td>Human Resource Management;</td>
<td></td>
</tr>
<tr>
<td>Information Systems; Insurance;</td>
<td></td>
</tr>
<tr>
<td>Management; Marketing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bachelor of Science:</th>
<th>Professional Certificates:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>Decision Support</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>Energy Management/Landman</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurship</td>
</tr>
<tr>
<td></td>
<td>Insurance</td>
</tr>
</tbody>
</table>

| Associate of Arts:              | Technical Certificate:                                            |
|                                | Supervision                                                       |

**Contact Information:** Colorado Mesa University, 1100 North Avenue, Department of Business, Dominguez Hall 301, Grand Junction, CO 81501; Phone: 970.248.1778; Website: [https://www.coloradomesa.edu/business/](https://www.coloradomesa.edu/business/)

#### Some Notable Program Highlights

Colorado Mesa University is accredited by the Higher Learning Commission. Additionally, accreditation of CMU's Energy Management/Landman program is by the American Association of Professional Landmen, making it one of only 12 AAPL-accredited undergraduate programs nationally.

The BBA, with twelve concentration choices, offers students the ability to specialize while still gaining the core set of business functional skills. A student can add two concentrations to their core knowledge.

The 3+2 option is a five-year program enabling students to earn both an undergraduate degree and the M.B.A. at the same time. Currently, the following are offered:

- B.B.A., with Finance Concentration + M.B.A.; and
- B.S., Construction Management + Master of Business Administration (3+2).

Also available is the B.S. in Accounting + Master of Business Administration whereby students earn the hours required to be a Certified Public Accountant (CPA).

Business clubs and organizations meet throughout the academic year for students with an interest in Business Honors, Hospitality, Phi Beta Lambda, Human Resources, Entrepreneurship, and Landman/Energy Management.
Each spring, the Department sponsors Entrepreneurship Day which includes a competition for students to "sell" their product to attendees, with the winner(s) awarded start-up capital.

Students in the Business Honors program examined the impact of childhood hunger in Mesa County as part of their research project and raised funds toward the purchase of Lunch Lizard, a food truck making food available to qualifying students during the summer.

The Accounting program offers Advanced Tax and Tax Research, Audit II, and Governmental Accounting as separate courses at the undergraduate level. Many competing programs offer these courses only at the graduate level.

Some Faculty Accomplishments
Faculty members in Business have earned degrees from prestigious institutions, such as University of Cincinnati, Oxford University, University of Utah, and University of Wyoming. Meet a few of them along with their diverse accomplishments and interesting professional contributions to CMU and their respective disciplines.

Morgan Bridge, Economics, is principal investigator for CMU's award from the Daniels Fund Initiative, a grant that supports strengthening ethics education across Western Colorado. CMU is one of 11 participating universities.

Brenda Courtad, Computer Information Systems, challenges students to think critically about business problems, and then understand and use the tools to solve real world problems, with a focus on healthcare operations management.

Tim Hatten, Entrepreneurship, sponsors students' participation in EdVenture's American Petroleum Institute (API) Marketing Challenge. CMU's team was selected as one of three finalists from the 23 submissions from across the U.S. to present its marketing strategy for informing youth about energy usage for the future to API Board.

Christine Noel, Accounting, was named a Woman to Watch: Leader of Note by the Colorado Society of CPAs in 2016.

Deborah Parman, Marketing, advises Business-Marketing students. At a recent State conference, members of Phi Beta Lambda, the Business academic honorary, garnered 34 awards, half of which were first place. All CMU participants took first or second place in their events, qualifying them to compete nationally. Among the awards earned by the nine who participated in the national competition, CMU students placed second and third Business Decision Making, third in Business Ethics, second in Human Resource Management, third in Macroeconomics, and third in Sports Management & Marketing.

Kyle Stone, Management, combines more than 20 years of industry experience combined with a doctorate in Human Resource Organizational Performance and Change, to offer a range of perspectives on current issues within many different industry settings.

Learning Spaces
The Gallegos Board Room in Dominguez Hall enables students to make presentations in a boardroom situation, very similar to what they will encounter in the business world. Four computer classrooms, complete with software specifically needed by students, are used for instruction.

Examples of Employers of Recent CMU Graduates
Chadwick, Steinkirchner, Davis & Co, P.C.; Colorado Division of Wildlife; Deloitte & Touche; Ernst & Young; Home Loan State Bank; KPMG; Kroenke Sports Enterprises; State Farm Insurance; Stoller Newport; Telluride Ski Resort; Department of Transportation; and WPX Energy.
CONSTRUCTION MANAGEMENT, ENGINEERING, ENGINEERING TECHNOLOGY

Degrees and Awards

Bachelor of Science (degree conferred by CMU):
- Construction Management
- Mechanical Engineering Technology

Bachelor of Science (degree conferred by University of Colorado Boulder):
- Civil Engineering
- Electrical and Computer Engineering
- Mechanical Engineering

Contact Information: Colorado Mesa University, Department of Engineering, 1100 North Ave., Confluence Hall, Grand Junction, CO 81501; Phone: 970.248.1696; Website: https://www.coloradomesa.edu/engineering/

Some Notable Program Highlights

Colorado Mesa University is accredited by the Higher Learning Commission. Both the Mechanical Engineering program, whose degree is conferred by the University of Colorado Boulder, and the CMU Mechanical Engineering Technology program are accredited by the Accreditation Board for Engineering and Technology (ABET).

Through a partnership between CMU and the University Colorado Boulder (UCB), baccalaureate engineering programs are offered entirely in Grand Junction. Coursework is delivered jointly by both institutions, originally in mechanical followed by civil engineering, with the degree conferred by UCB. Electrical and computer engineering is the most recent program addition. A separate application to UCB is required for admission to the engineering programs.

The engineering programs prepare students to sit for the Fundamentals of Engineering (FE) exam, which when coupled with four years of industry experience, allows students to take the Professional Engineering (PE) exam.

The Mechanical Engineering Technology program and the Construction Management program were developed as career ladders that build on an Associate of Applied Science degree in the same disciplines.

The Engineering Club has developed Mesa Motorsports, the student group participating in Formula SAE, an annual international competition in Michigan. The competition challenges students to design, fabricate, and race an open-wheeled single seat automobile.

CMU Engineering has a chapter of the Society of Women Engineers. They participate in Go Baby Go, which modifies rideable small electric toy cars for use by disabled children.

Students participate in hands-on coursework throughout their time at CMU. During their first year, students build and compete in the annual Trebuchet Challenge, which tests engineering students' understanding on the speed and accuracy of the trebuchet.

The Construction Management program prepares students with knowledge and skillsets for employment as construction managers in residential, commercial, heavy civil and industrial construction. curriculum is clustered around three broad content areas: Construction Science, Construction Management, and Business Management.
The Construction Management program is a member of the Associated Schools of Construction, and students participate in its annual student competition and conference held in Sparks, Nevada, facilitating networking with large construction companies that are recruiting students for internships and full-time employment after graduation. Students can also participate in activities of the Association of Construction Project Managers Association.

**Some Faculty Accomplishments**

Faculty members in Engineering have earned degrees from prestigious institutions, such as Colorado School of Mines, Cornell University, Georgia Institute of Technology, Stanford University, University of Colorado, University of Dayton, and University of Missouri. Meet a few of them along with their diverse accomplishments and interesting professional contributions to CMU and their respective disciplines.

Kelly Bevill, Civil Engineering, brings professional experience in activities that include land acquisition, remediation, and foundation design/ construction.

Scott Bevill, Mechanical Engineering, is researching the potential of flip-flop style sandals as intervention footwear to treat medical compartment knee osteoarthritis.

Scott Kessler, Mechanical Engineering, focuses on forensic engineering, failure analysis, finite element analysis, artificial neural networks, and metallurgical analysis.

Sarah Lancaster, Mechanical Engineering, has research interests that include establishing and optimizing manufacturing processes.

Troy Miller, Construction Management, specializes in construction estimating, construction project management and the implementation of technology to enhance the management of a jobsite.

Christopher Penick, Mechanical Engineering, teaches an array of courses that include engineering thermodynamics, fluid power systems, CAD, and fabrication.

**Learning Spaces**

Confluence Hall includes specialized engineering facilities such as computer labs, project labs, specialty labs, machining and fabrication facilities, welding and wood shops, and a 15-foot wind tunnel. Labs and shops house leading-edge equipment and tools including, but not limited to a hydraulic ironworker, CNC plasma table, tensile machine, and optical comparator.

The Construction Management program is located in the Archuleta Center and includes a multi-purpose classroom containing 24 dual monitor computer stations and lab tables for hands on experiments with plumbing and electrical; a shop to build and deconstruct a structural steel building and HVAC system; and a soil and foundation testing lab. A mobile “Compact Field Office” also used to simulate the use of “paperless jobsites.”

**Examples of Employers of Recent CMU Graduates**

Engineering Students: Abbott Laboratories; Bonsai Design; Capco; Coorsteck; GPD Global; FCI Constructors; Ford Motor Company; Hensel Phelps Construction; Kiewit: Construction, Engineering, and Mining Services; NASA; National Renewable Energy Lab; JGMA; Munro Pump; PCL Construction; Quest Civil Constructors; Shaw Construction; and West Star Aviation.
HEALTH SCIENCES AND KINESIOLOGY

Degrees and Awards

Graduate Level
Doctor of Nursing Practice

Master of Science in Nursing. Cognates: Advanced Nursing Practice; Nursing Education; Nursing Leadership and Administration

Certificate: Health Information Technology Systems

Bachelor of Science in Nursing

Associate of Applied Science:
- Nursing
- Medical Laboratory Technician
- Radiologic Science
- Sport Management
- Surgical Technology

Technical Certificate: Health Information Technology Systems

Undergraduate Level
Bachelor of Arts:
- Kinesiology. Concentrations: Adapted Physical Education; Fitness and Health Promotion; K-12 Teaching

Bachelor of Science:
- Exercise Science
- Fitness and Health Promotion
- Radiologic Science
- Sport Management

Associate of Applied Science:
- Medical Laboratory Technician
- Radiologic Science
- Surgical Technology

Undergraduate Level
Bachelor of Science in Nursing

Certificate: Health Information Technology Systems

Minor:
- Exercise Science
- Sport Management

Professional Certificate:
-Computed Tomography
- Health Information Technology Systems
- Magnetic Resonance Imaging
- Personal Training

Technical Certificate: Practical Nurse

Contact Information: Colorado Mesa University, 1100 North Avenue,
- Department of Health Sciences, Health Sciences 101, Grand Junction, CO 81501; Phone: 970.248.1398; Website: https://www.coloradomesa.edu/health-sciences/
- Department of Kinesiology, Maverick Center 237B, Grand Junction, CO 81501; Phone: 970.248.1635; Website: https://www.coloradomesa.edu/kinesiology/

Some Notable Program Highlights
Colorado Mesa University is accredited by the Higher Learning Commission. Additionally, accreditation of the baccalaureate and graduate Nursing programs is by the Commission on Collegiate Nursing Education. Additionally, program-level accreditation has been given to:
- Nursing - The certificate program is accredited by the Accreditation Commission for Education in Nursing. Accreditation of the baccalaureate program is by Commission on Collegiate Nursing Education. These programs also are approved by the Colorado State Board of Nursing.
- Medical Laboratory Technician program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences.
- Radiologic Sciences is accredited by the Joint Review Committee on Education in Radiologic Technology.
- Athletic Training program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Note: The program is voluntarily withdrawing its accreditation effective May 2019, as it is the intent of the University to offer a graduate-level Athletic Training program as early as Fall 2019. The new program will be designed in accordance with the State of Colorado Department of Regulatory Agencies
(DORA), the Board of Certification (BOC), and the CAATE. As a result, the program is on probation as of February 24, 2017 by CAATE. More information will be posted on the CMU website as it becomes available.

Pass Rates on Licensure/Certification Examinations: Nursing (B.S.N.): 95.6% (Colorado = 90.4%; U.S. = 84.6%) on the National Council Licensure Examination (NCLEX); Radiologic Sciences: 100% passing on first attempt on the American Registry of Radiologic Technologists exam (Colorado = 71.4%; U.S. = 87.2%).

Admission to these professional programs requires a separate application. Admission to the University does not guarantee admission to a specific program.

Nursing faculty sponsor the CMU chapters of Sigma Theta Tau (academic honorary in Nursing) and the Student Nurses Association.

CMU's Real Medicine Club is a recognized campus at the Silver Level for the past two years by the national American College of Sports Medicine's Exercise is Medicine on Campus program that encourages faculty, staff and students to work together toward improving the health and well-being of the campus community.

The Monfort Human Performance Lab houses tools, software, and equipment for physiological and biomechanical research by faculty and students.

The Center for Health Innovation and Practice, focusing on health-related research including studies of aging, circulation, obesity, clinical practices, exercise, kinesiology, and health, is part of CMU's Redifer Institute, the administrative umbrella for various outreach projects.

A Master of Physician Assistant Studies program is under development, with the goal of matriculating its first class in 2019, after accreditation is granted by the Higher Learning Commission and the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA).

Some Faculty Accomplishments
Faculty members in the Health Sciences and Kinesiology have earned degrees from prestigious institutions, such as Arizona State University, Brigham Young University, Colorado State University, Northcentral University, Regis University, United States Sports Academy, University of Arizona, University of Colorado, University of Kansas, University of Maryland, University of New Mexico, University of North Dakota, University of Pittsburgh, University of Utah, and Walden
University. Meet a few of them along with their diverse accomplishments and interesting professional contributions to CMU and their respective disciplines.

Diana Bailey, Nursing, serves as the RN-BSN program director and has research interests in simulation and ethical decision-making.

Theresa Chase, Nursing, is trained as a Gestalt psychotherapist and has training in equine-assisted learning and psychotherapy.

Susan Goebel, Nursing, focuses on forensics, health literacy, and legal nurse consulting, along with commitments to integrative health and holistic healing.

Lucy Graham, Nursing, has a special research interest in assisting people with HIV living in rural areas to stay engaged in their care.

Olga Grisak, Radiologic Sciences, serves as Clinical Coordinator for the Radiologic Sciences program.

Kathleen Hall, Nursing, is involved in research on health behavior change, therapeutic physical activity for older adults, and primary care follow-up of adult survivors of cancer.

Jeremy Hawkins and Kristin Heumann, Kinesiology, have published research on the clinical use of a hyperbaric chamber as a modality to aid in recovery of athletes' post-concussion syndrome and fatigue.

Bridget Marshall, Nursing, has served as a health care provider in family planning clinics and private practice and brings clinical practice experience involving children who were alleged victims of sexual abuse.

Tracy Matthews, Medical Laboratory Technician, teaches in the areas of phlebotomy, clinical microscopy, hematology/hemostasis, and chemistry.

Michael Reeder, Kinesiology, is using musculoskeletal ultrasound to evaluate athletes as part of lab testing and evaluation and demonstrating anatomical changes while in motion.

---

**Learning Spaces**

Health Sciences Building, the former home of Community Hospital, houses classrooms, a simulation center and laboratory. The Clinical Education Center houses a computer lab, clinical labs, a library, and two state-of-the-art simulation labs.

The Monfort Human Performance Lab features state-of-the-art equipment and provides advanced physiological and biomechanical performance and wellness testing for students, faculty, staff and community members.

The Maverick Pavilion houses several indoor sport activities and includes the Chamberlin Cycling Center and a climbing wall.
Examples of Employers of Recent CMU Graduates

Colorado Canyons Hospital and Medical Center; Community Hospital; Community Hospital Surgery Center; Delta Memorial Hospital; Grand River Hospital District; Hope West; Kroenke Sports and Entertainment; Mesa County Corrections; Mesa County Department of Health and Human Services; Mesa County School District 51; Mind Springs Health; Montrose Memorial Hospital; St. Mary's Medical Center; St. Mary's Surgery Center; Major League Baseball (Kansas City Royals, Colorado Rockies); Major League Soccer (Colorado Rapids, Portland Timbers); Minor League Baseball (Asheville Tourists, Grand Junction Rockies, Lake Elsinore Storm); Primary Care Partners; Professional Basketball (Denver Nuggets); Rocky Mountain Orthopaedics; VA Medical Center; Valley View Hospital.
Degrees and Awards

**Graduate Level**
Certificate: Applied Mathematics

**Undergraduate Level**
Bachelor of Science:
- Biological Sciences. Concentrations: Cellular, Molecular, and Developmental Biology; Ecology, Evolution, and Organismal Biology; Secondary Education
- Chemistry. Concentrations: Biochemistry; Chemistry
- Computer Science
- Environmental Science and Technology. Concentrations: Pollution Monitoring and Control; Ecosystem Restoration
- Geosciences. Concentrations: Environmental Geology; Geology; Secondary Education
- Mathematics. Concentrations: Applied Mathematics; Mathematics; Secondary Education; Statistics
- Physics

**Associate of Science**
Emphases: Biology; Computer Science; Geology; Mathematics; Physics

**Minors:**
- Biology
- Chemistry
- Computer Science
- Environmental Science and Technology
- Forensic Science
- Geographic Information Science and Technology
- Geology
- Mathematics
- Physics
- Statistics
- Watershed Science

**Professional Certificate:**
- Cyber-Security
- Web Application Development
- Geographic Information Science and Technology
- Sustainability Practices

**Contact Information:** Colorado Mesa University, 1100 North Avenue,  
- Department of Biological Sciences, Wubben Science 232, Grand Junction, CO 81501; Phone: 970.248.1993;  
  Website: https://www.coloradomesa.edu/biology/  
- Department of Computer Science, Mathematics, and Statistics, Wubben Science 132, Grand Junction, CO 81501;  
  Phone: 970.248.1407; Website: https://www.coloradomesa.edu/computer-science-mathematics-statistics/  
- Department of Physical and Environmental Sciences, Wubben Science 232, Grand Junction, CO 81501;  
  Phone: 970.248.1993; Website: https://www.coloradomesa.edu/physical-environmental-sciences/

**Some Notable Program Highlights**

Colorado Mesa University is accredited by the Higher Learning Commission.

The Saccomanno Internship Program in Biological Research provides a 10-week summer research opportunity, under the mentorship of CMU faculty members, to CMU students or Mesa County residents attending another higher education institution. Students also meet to discuss current topics in biomedical research, including research ethics and scientific publication and presentation.
Because of the significant number of undergraduates involved in research projects with faculty, many graduates of these programs pursue further education in their respective disciplines of Biology, Chemistry, Geology, Environmental Science, Mathematics, and Physics, as well building on their pre-professional education for Dental, Medical, Nursing, Pharmacy, Physical Therapy, Physician Assistant, or Veterinary graduate programs.

The departments sponsor CMU chapters of five academic honor societies: Beta Beta Beta (Biology); Kappa Mu Epsilon (Mathematics), Sigma Gamma Epsilon (Earth Sciences), Sigma Pi Sigma (Physics), and Upsilon Pi Epsilon (Computer Science).

CMU is a member of the United States Air Force Academy’s Falcon Telescope Network. CMU faculty and students can make astronomical observations from campus through the internet using several telescopes around the world in addition to a telescope near Grand Junction. CMU Physics faculty are constructing an additional telescope facility that is designed for traditional on-site viewing and used to search for planets outside the solar system.

Students from the Society of Physics host and coordinate an annual Egg Drop competition to promote interest in Science, Technology, Engineering, and Mathematics (STEM) disciplines.

Students can now complete a concentration in Biochemistry through the Chemistry major. A degree in Biochemistry is great preparation for work in the biotechnology industry.

All students majoring in Mathematics complete an undergraduate research project. Recent projects include the mathematics involved with digital imaging, fractals and 3-D printing, and dynamical systems.

Computer Science’s Team Grit, comprised of faculty and students, built two robotics arms on the back of an off-the-shelf side-by-side vehicle as part of the AgBot Challenge. The team’s objective was to build a low-cost seeding, weeding, and feeding robotic to aid farmers’ ability to maintain and/or adjust the layout of their existing equipment.

The Geosciences program collects and disseminates data related to small seismic events in the region as part of the research through the CMU Seismic Network.

The Environmental Science Program’s sustainability coursework in renewable energy, sustainable building, and permaculture have been expanded to include complementary courses in ecological design and systems thinking.

Computer Science is a flexible program that responds quickly to industry changes, illustrated by implementation of a technical certificate in Cyber-Security, a professional certificate in Web Application Development, and a Cyber-Security Center.

The Physical and Environmental Sciences Department is associated with two of the centers comprising CMU’s Redifer Institute, the administrative umbrella for various CMU outreach projects. The Ruth Powell Hutchins Water Center promotes active debate and collaboration on water resources, while the Unconventional Energy Center funds applied research projects on the best use of Colorado's natural resources.
Some Faculty Accomplishments

Faculty members in Mathematics and the Biological, Environmental, and Physical Sciences have earned degrees from prestigious institutions, such as California Institute of Technology, Cornell University, Georgetown University, Indiana University, Lehigh University, London University, Montana State University, New Mexico Institute of Mining and Technology, Rice University, Stanford University, Syracuse University, University of Arizona, University of Chicago, University of Colorado, University of Miami, University of North Carolina, University of Pennsylvania, University of Texas, University of Tennessee, University of Utah, and University of Wisconsin. Meet a few of them along with their diverse accomplishments and interesting professional contributions to CMU and their respective disciplines.

Andres Aslan, Geosciences, presents research on the origin of the Colorado River in the Grand Valley and mountain-building in the Rocky Mountain region and its effects on landscape evolution.

Ram Basnet, Computer Science, specializes in phishing detection and leads research in information security, data mining, and machine learning.

Margot Becktell, Biological Sciences, researches the effects of sucrose esters on the growth of the plant pathogen, as part of determining why petunias are less susceptible than potatoes or tomatoes to late blight, a plant disease most widely recognized for its role in the Irish Potato Famine.

Rex Cole, Geosciences, studies the geologic evolution of the nearby Grand Mesa and the sedimentology of local formations that are important sources of natural gas.

David Collins, Physics, conducts research in quantum information and quantum computing.

Lisa Driskell, Mathematics, conducts research focusing on how dynamical systems can assist in understanding cardiac electrical activity as a precursor to potentially fatal conditions of the heart.

Eriek Hansen, Biological Sciences, was presented the 2018 Robert Gaffney Achievement Award at the American Academy of Forensic Sciences, recognizing excellence in a presentation by an emerging forensic scientist.

Deborah Kennard, Environmental Science, is collecting data that documents the effects of experimental warming (similar to that expected with climate change) on the abundance and species composition of understory plants in a Puerto Rican tropical rain forest. She also studies local problems, such as changes in streamside plant communities after removal of tamarisk.

Sam Lohse, Chemistry, specializes in nanomaterials chemistry as well as how chemistry can improve the quality of human life while mitigating the risks from human and environmental hazards resulting from chemical industries.

Tamera Minnick, Environmental Science, studies the effectiveness of revegetation projects in disturbed areas, such as natural gas drilling pads and pipeline corridors.

Tom Walla, Biological Sciences, travels to Ecuador annually to meet with collaborators at the National Institute for Biodiversity. He recently returned to the U.S. with more than 3,000 moth and butterfly specimens for research as part of the Tropical Field Biology course.
David Weinberg, Chemistry, studies the structure and reactivity of chemical compounds that are used to catalyze energy conversion reactions.

Freddy Witarsa, Environmental Science, develops bioreactors for the production of energy from agricultural wastes.

Jared Workman, Physics, conducts simulations of astronomical events. With collaborators, he demonstrated that a gamma ray burst observed in the vicinity of a well-publicized 2017 binary star merger originated from that merger.

Examples of Employers of Recent CMU Graduates

Amazon; Colorado Department of Wildlife; Colorado Division of Minerals and Geology; Community Hospital Pharmacy; Field Geoservices; Gbprotec; Grande River Environmental; Hill Air Force Base; Kleinfelder Geotechnical Engineering; Mathematics and Science teachers in secondary schools across Colorado; Northrop Grumman; Quantum Signal; Raytheon Space and Airborne Systems; Rocky Mountain Health Plans; Ruby Canyon Engineering; St. Mary's Hospital; U.S. Department of Defense; Visa; Westwater Engineering; WSI Global.

Learning Spaces

The University is situated in the midst of major geological formations. With easy access to the Rocky Mountains and the Colorado Plateau, field trips and research to Colorado National Monument and ranges sculpted by glaciers, such as the San Juan Mountains, the Arches, and Black Canyon of the Gunnison are integrated throughout the Geosciences curriculum.

Biological and Environmental Sciences share a temperature-controlled greenhouse for coursework as well as faculty and student research.

Each program has dedicated labs for collaborative research, including a lab for use of Geographic Information Systems and Technology for collecting and analyzing data.

Computer Science faculty have supported students' work and offered Introduction to Robotics and Computer Architecture through the Maverick Innovation Center.

The Cyber Security Center offers students an opportunity to participate in security reviews and other security projects for both local companies and outside industries.

The Mathematics program currently uses a classroom outfitted with a large collection of manipulative teaching aids, geometry tools, calculators, and reference sources for preparing future math educators. The Mathematics Projects Lab makes specialized software and computer support available to working on senior research projects and provides meeting space for Calculus Help Sessions and Math Club activities.
## Degrees and Awards

### Graduate Level
- **Certificate:** Social Sciences

### Undergraduate Level

#### Bachelor of Applied Science:
- Criminal Justice. Concentration: Peace Officer Standards and Training (POST Academy)

#### Bachelor of Arts:
- Criminal Justice
- History. Concentrations: History; Secondary Education
- Political Science
- Psychology. Concentrations: Psychology; Counseling Psychology
- Sociology

#### Bachelor of Social Work

### Minors:
- Addiction Studies
- Archaeology
- Criminal Justice
- Forensic Anthropology
- Forensic Investigation in Criminal Justice
- Forensic Investigation in Psychology
- History
- International Studies
- Political Science
- Public History
- Psychology
- Social Work
- Sociology
- Women's & Gender Studies

### Professional Certificates:
- Cultural Resource Management
- Emergency Management & Disaster Planning

---

**Contact Information:** Colorado Mesa University, 1100 North Avenue, Department of Social and Behavioral Sciences, Lowell Heiny Hall 413, Grand Junction, CO 81501; Phone: 970.248.1696; Website: [https://www.coloradomesa.edu/social-behavioral-sciences/](https://www.coloradomesa.edu/social-behavioral-sciences/)

---

**Some Notable Program Highlights**

Colorado Mesa University is accredited by the Higher Learning Commission. Accreditation of the Social Work program is by the Commission on Accreditation-Council on Social Work Education. The Addiction Studies program meets the requirements for Certified Addiction Counselor (CAC) II training as outlined by the Colorado Department of Human Services and Office of Behavioral Health.

Upon completion of the Addiction Studies program, students are eligible to take the National Association for Addictions Professionals (NAADAC) NCAC I or NCAC II exam for CAC II certification as required in Colorado.
The department sponsors CMU chapters of four academic honor societies: Alpha Phi Sigma (Criminal Justice), Phi Alpha Theta (History), Pi Sigma Alpha (Political Science), and Psi Chi (Psychology). Students have a wide selection of clubs, in addition to the academic honoraries, in which to participate: the Criminal Justice Association, Forensic Science Club, Political Science Club, Pre-Law Club, Psychology Club, Social Work Club, and the Sociology Club.

A significant number of History graduates pursue graduate programs at institutions such as Boston University, New Mexico State University, North Carolina State University, Regis University, University of Maine, University of Michigan, University of Nevada-Las Vegas, University of Northern Colorado, University of Texas at El Paso, and University of Wyoming.

Psychology majors with a concentration in counseling complete a 180-hour practicum in various community settings.

The Forensic Investigations Research Station (FIRS), centered on teaching, research, and service regarding the decomposition of human remains, is the only facility of its type located in a dry, high altitude environment with sunshine for an average of 300 days per year.

Psychology students will be volunteering with orphans and those who are physically/mentally disabled to teach them English in an afterschool program in Peru. One student has also raised enough money to purchase and donate 60 pairs of “Shoes that Grow” to an orphanage. The group is also traveling to various Peruvian sites that include Lake Titicaca, Machu Picchu, and Huayna Picchu and then presenting their perspectives from the trip through an ethnographic study.

The Wayne N. Aspinall Foundation sponsors over $30,000 in scholarships for Social and Behavioral Science students annually.

Psychology students compete annually in the Rocky Mountain Psychological Association Conference. Majors in Sociology present research findings.

The Archaeological Summer Field School offers students projects for hands-on experience using skills necessary in field archaeology including excavation, artifact analysis, survey and mapping with electronic instruments and GPS, illustrated by:

* re-mapping of an Indian War-era Buffalo Soldier (African-American) camp in the Guadalupe Mountains National Park (TX), established to protect Euro-American settlers in the region, and then analyzing historic artifacts from the camp.

* excavating small sites in Mesa County, in partnership with the Grand Junction Field Office of the Bureau of Land Management, that have at least one hearth area but in danger of being lost to erosion, and then documenting the age and purpose of hearths.
The department houses several of the centers comprising CMU's Redifer Institute, the administrative umbrella for various outreach projects: the Natural Resource Center assists with policy development and impact analyses related to public lands and natural resources in consultation with federal, state, and local governments, while the Social Research Center conducts surveys on topics of regional interest.

Some Faculty Accomplishments

Faculty members in the Social and Behavioral Sciences have earned degrees from prestigious institutions, such as Arizona State University, Brigham Young University, Emory University, Indiana State University, Michigan State University, Ohio State University, Temple University, and University of Wyoming. Meet a few of them along with their diverse accomplishments and interesting professional contributions to CMU and their respective disciplines.

Melissa Connor, Forensic Anthropology, serves as the director of the University's Forensic Investigation Research Station (FIRS).

Kate Dreiling, Criminal Justice, works with professionals in the local community on the prevention of violence against women, specifically as it relates to sexual assault and partner violence.

Justin Gollob, Political Science, and Brian Parry, Psychology, have published an article and monograph on the benefits of public lands.

Jake Jones, Psychology, collaborated with students in creating the National Alliance on Mental Illness, the first NAMI on a campus in Colorado.

Doug O'Roark, History, offers multidisciplinary courses as part of the Maverick Milestone curriculum that include Technology and Empires and Disease and Culture.

Adam Rosenbaum, History, specializes in the cultural history of modern Europe with a focus on Germany and has published extensively on the marketing of tourism in Bavaria.

Steven Schulte, History, is completing a book Colorado's 20th century water wars.

Michelle Sunkel, Social Work, brings extensive clinical experience in medical social work, specializing in trauma, mental health, additions, and crisis interventions.

Brenda Wilhelm, Sociology, is conducting research for a monograph about step-parenting.
Learning Spaces

The Psychology program has an observation room that enables faculty members to observe students as they practice counseling techniques.

The Forensic Investigations Research Station (FIRS) has a morgue outfitted with modern equipment and a cooler as well as up-to-date teaching spaces.

Examples of Employers of Recent CMU Graduates

AmeriCorps; Arial Clinical Services; Associates in Behavioral Counseling; Aurora (CO) Police Department; Behavior Services, Incorporated; Caprock Behavioral Services; Colorado Historical Society; Encounter Counseling Center; Fairview Health Services (MN); Federal Bureau of Investigations; Grand Junction (CO) Police Department; Grand Junction Regional Center; Grand Valley Senior Services; Hilltop Community Resources and The Commons; Lakewood (CO) Police Department; Mesa County Community Corrections; Mesa County Department of Health and Human Services; Mesa County Partners; Mesa County Public Defender's Office; Mesa County Sheriff's Office; Mesa County Valley School District 51; Mesa Developmental Services; Montrose County Department of Human Services; Munro Companies; Strive Prep SMART High School (Denver); and Western Slope Center for Children.
COLORADO MESA UNIVERSITY

TEACHER EDUCATION

Degrees and Awards

Graduate Level

Master of Arts and Graduate Certificates:
Education. Cognates: Educational Leadership;
English for Speakers of Other Languages;
Exceptional Learner; Initial Licensure; Teacher Leader

Undergraduate Level

Bachelor of Arts: Early Childhood, Special Education
Coursework leading to initial licensure in Elementary,
Secondary, K-12, or Early Childhood

Contact Information: Colorado Mesa University, 1100 North Avenue, Center for Teacher Education, Dominguez Hall 109, Grand Junction, CO 81501; Phone: 970.248.1786; Website: https://www.coloradomesa.edu/teacher-education/

Some Notable Program Highlights

Colorado Mesa University is accredited by the Higher Learning Commission. Additionally, the Teacher Education program is approved by the Colorado Department of Higher Education and the Colorado Department of Education.

The State of Colorado requires each teacher candidate to complete both content coursework in an academic major and a sequence of professional education courses that includes extensive field experience and classroom placements through the Center for Teacher Education. Students must complete content testing prior to admission to the Teacher Education program and prior to their student teaching assignment.

The pass rate for Teacher Education test takers pursuing initial licensure is 99% on the PRAXIS II licensure exam.

Admission to the teacher education program requires a separate application. Admission to the University does not guarantee admission to the program.

The rate of Teacher Education completers initially employed in their field by licensure area is:
- Educational Leadership Employment: 92%
- Special Education Employment: 75%
- Elementary Education Employment: 72%
- Secondary Education Employment: 84%
- K-12 Education Employment: 74%

To encourage student teachers in Colorado rural school districts who might subsequently become a teacher in a rural district in Colorado, the Colorado Center for Rural Education and the Colorado Department of Higher Education awards Colorado Rural Teaching Scholarships to qualifying teacher education candidates.

The Center has student chapters of the Council for Exceptional Children and National Science Teacher Association.

The Teacher Job Fair is an annual event providing an opportunity for teacher candidates to learn about upcoming employment opportunities with school districts, and when available, to interview for opening positions.
Some Faculty Accomplishments

Faculty members in Teacher Education have earned degrees from prestigious institutions, such as the University of Northern Arizona, University of Denver, University of Houston, and University of South Florida and also bring extensive experience in K-12 teaching and administration. Meet a few of them along with their diverse accomplishments and interesting professional contributions to CMU and their respective disciplines.

Nancy Alex has scholarly interests in issues of social justice in education, particularly focusing on school finance.

Blake Blickham’s focus is on integrated literacy and the moral dimensions of teaching, and he brings international teaching experience from working in Usbekistan and Mexico.

Cynthia Chovich brings expertise in language and literacy acquisition and development, along with teaching integrated technology, assessment, curriculum and instruction.

Lisa Friel-Redifer researches standards-based assessment in K-12 as well as how children learn mathematics.

Ann Gillies studies higher education experiences for students with autism spectrum disorder as part of her broader interests in inclusion, international perspectives on disability, and experiential learning and teaching to diversity.

Diana Sirko brings a breadth of teaching and administrative experience in K-12 education that spans large and small, urban, suburban, and rural school districts. She also was Deputy Commissioner of Education at the Colorado Department of Education, a school superintendent, and teacher of math and science.

Learning Spaces

A classroom in Dominguez Hall, dedicated to Teacher Education majors, is outfitted with smart technology that simulates tools and software found in K-12 settings.

Examples of Employers of Recent CMU Graduates

Colorado School Districts include: Adams 12; Aurora, CO; Caprock Academy Charter; Colbran; Cotopaxi; Debeque, CO; Delta County Schools; Denver Public Schools; Douglas County; Eagle RE50J; Garfield RE2; Garfield RE16; Greeley-Evans SD; Mesa County Valley School District 51; Montrose County; Parker; Roaring Fork RE1; St. Vrain; and Steamboat Springs. School districts in other states include Chandler, Gilbert, and Kayenta in Arizona; Endeavor College Prep in California; Barbers in Hawaii; Anthony and Katy in Texas; and San Juan in Utah.
STUDENT SUCCESS AND SATISFACTION

Success after Graduation

Based on CMU's Alumni Surveys, 90.6% of baccalaureate degree respondents were employed, with 76% in a position related to their undergraduate field of study. Additionally, 90.4% of the survey respondents indicated that they were adequately to well-prepared for their career.

Student Learning Outcomes

According to a national survey by Association of American Colleges and Schools, eight out of ten employers place value on baccalaureate graduates who possess intellectual and practical skills and applied learning experiences in their chosen field of study. These expectations serve as the foundation for CMU's four student learning outcomes (SLO) (i.e., what students should know and be able to do upon graduation).

A survey of 606 CMU graduates responded that their CMU education had adequately to very well prepared them to think critically (98.5%), prepare a well-organized written and/or oral presentation (97.5%), apply quantitative methods correctly (96.5%), and apply the knowledge learned in their major through a hands-on research project (98.5%). A fifth SLO – ethical reasoning – is now being implemented.

Pass Rates on Licensure/Certification Examinations

- Accounting (by exam section):
  - 52.4% Financial Accounting and Reporting (Colorado = 51.1%; U.S. = 45.6%)
  - 47.6% Auditing and Attestation (Colorado = 52.1%; U.S. = 45.9%)
  - 65.0% Regulation (Colorado = 55.5%; U.S. = 48.4%)
  - 77.8% Business Environment & Concepts (Colorado = 64.5%; U.S. = 55.4%)

- Nursing (B.S.N.): 95.6% (Colorado = 90.4%; U.S. = 84.6%) on the National Council Licensure Examination (NCLEX)

- Radiologic Sciences: 100% passing on first attempt on the American Registry of Radiologic Technologists exam (Colorado = 71.4%; U.S. = 87.2%)

- Teacher Education (initial licensure): 99% on the PRAXIS II (comparative state and national pass rates not available)

Student Competitions and Publications

- Business - Marketing: After being selected as one of three finalists from 23 university submissions from across the U.S. to EdVenture’s American Petroleum Institute (API) Marketing Challenge, CMU’s team placed third in the final competition. The team earned $5,000 that was donated to the CMU Foundation for Business student scholarships.

- Business - Marketing: At a recent State conference, members of Phi Beta Lambda, the Business academic honorary, garnered 34 awards, half of which were first place. All CMU participants took first or second place in their events, qualifying them to compete nationally. Among the awards earned by the nine who participated in the national competition, CMU students placed second and third in Business Decision Making, third in Business Ethics, second in Human Resource Management, third in Macroeconomics, and third in Sports Management & Marketing.

- English: Based on work in a senior seminar class, an English major published “The Weird: Aesthetic Effect and Power” in the Midwest Journal of Undergraduate Research (Summer 2017). The student developed a theory of "the weird" rather than simply applying some theory to make sense of unusual art/texts.
Environmental Science: An ES student major won an award for best student presentation at the American Society of Mining and Reclamation for his comparison of multispectral data collected from a drone versus data from traditional techniques for monitoring the progress of revegetation on disturbed lands.

Graphic Design: For the second year, CMU placed first in the Graphic Design advanced category at The Review, an annual portfolio competition of students from across Colorado that was sponsored by the American Institute of Graphic Arts and The One Club (formerly the Art Directors Club of Denver).

Mathematics (Statistics): Undergraduate majors researched college students’ perceptions of social media by defining the topic, writing a survey, collecting and analyzing data, and drawing conclusions, with the results published in the International Journal of Higher Education.

High Impact Practices

High impact practices (HIP) are educational experiences found to be beneficial to student success, especially when a student participates in two or more of these opportunities. Examples of these practices include first-year transition to college courses, undergraduate research, internships and other field experiences such as clinical placements and student teaching, senior capstone courses, and study abroad.

The National Survey of Student Engagement found that 66% of CMU’s survey participants completed at least two or more HIP practices. The survey also reported a participation of 61% for other Rocky Mountain public institutions and for colleges and universities nationwide.

Student Satisfaction

At Colorado Mesa University, students are our most important asset, and their feedback on many aspects of the University is taken seriously. On a recent survey, here’s what CMU students told us about their satisfaction.

<table>
<thead>
<tr>
<th>Faculty and Effective Instruction</th>
<th>Percentage Satisfied/Highly Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearly all of the faculty are knowledgeable in their field.</td>
<td>93</td>
</tr>
<tr>
<td>I am able to experience intellectual growth here.</td>
<td>91</td>
</tr>
<tr>
<td>The quality of instruction I receive in most of my classes is excellent.</td>
<td>86</td>
</tr>
<tr>
<td>Faculty are usually available after class and during office hours.</td>
<td>90</td>
</tr>
<tr>
<td>There is a commitment to academic excellence on this campus.</td>
<td>87</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Focus on and concern for students</th>
<th>Percentage Satisfied/Highly Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are made to feel welcome on this campus.</td>
<td>88</td>
</tr>
<tr>
<td>The campus staff are caring and helpful.</td>
<td>86</td>
</tr>
<tr>
<td>It is an enjoyable experience to be a student on this campus.</td>
<td>86</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Support Services, Student Life, and Campus Environment</th>
<th>Percentage Satisfied/Highly Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library resources and services are adequate</td>
<td>91</td>
</tr>
<tr>
<td>Computer labs are adequate and accessible.</td>
<td>89</td>
</tr>
<tr>
<td>Tutoring services are readily available.</td>
<td>90</td>
</tr>
<tr>
<td>Living conditions in the residence halls are comfortable (adequate space, lighting, heat, air, etc.)</td>
<td>79</td>
</tr>
<tr>
<td>There are adequate services to help me decide upon a career.</td>
<td>81</td>
</tr>
<tr>
<td>The campus is safe and secure for all students.</td>
<td>87</td>
</tr>
</tbody>
</table>
CMU OPPORTUNITIES THAT ENHANCE STUDENT SUCCESS

Participation in co- and extra-curricular activities is an important component to the success of university students. Student engagement in formal and informal activities—often referred to as high impact practices (HIP)—reinforce learning and can take many forms, both in and outside the classroom and are especially effective when a student participates in two or more of these opportunities. They facilitate making connections with other students and faculty members that are beneficial to students in handling the challenges of college life, and in upper division coursework, offer experiences for students to apply their learning, often to real-life problems.

CMU offers deliberately different types of student engagement throughout the semester that lead to students making connections with others on campus and developing an early sense of belonging at CMU. A recent National Survey of Student Engagement found that 64% of CMU survey participants classified as seniors completed at least two or more HIPs, while a participation rate of 61% was reported for other Rocky Mountain public institutions and for colleges and universities nationwide. The following are some high impact practices.

First-year Transition to College Course

The Freshman Year Initiative (FYI) program eases the transition into university life by introducing entering students to college-level expectations as well as CMU resources that will assist them in their academic success.

Study in Second Languages

Colorado Mesa University offers a wide array of second languages. In addition to classes and a major in Spanish, coursework is offered French, Greek, Japanese, Mandarin, Russian, and American Sign Language.

Honors

CMU offers highly motivated undergraduates with enriched studies in their academic major. Completion of honors requirements varies by academic program, but each includes opportunities for students to actively engage in more advanced study through coursework and a capstone project.

Student Learning Outcomes and the Maverick Milestone

According to a national survey by Association of American Colleges and Schools, eight out of 10 employers place value on baccalaureate graduates who possess intellectual and practical skills and applied learning experiences in their chosen field of study. These expectations serve as the foundation for CMU's four student learning outcomes (SLO) (i.e., what students should know and be able to do upon graduation).

A survey of 606 CMU graduates responded that their CMU education had adequately to very well prepared them to think critically (98.5%), prepare a well-organized written and/or oral presentation (97.5%), apply quantitative methods correctly (96.5%), and apply the knowledge learned in their major through a hands-on research project (98.5%). A fifth SLO—ethical reasoning—is now being implemented.

In addition to SLOs, CMU offers the Maverick Milestone, which introduces sophomores to learning that integrates their knowledge and cognitive skills from different lower division courses that serve as a foundation for subsequent upper division coursework. In addition to learning outcomes listed above, the ability to integrate learning from multiple perspectives is significant preparation for addressing the numerous unscripted, complex problems of the future that students will encounter in their personal, professional and civic lives.
Designed for students to think about a topic or issue from different points of view and not limited to a single major, instructors from different majors have recently offered courses that include:

- Numbers and Patterns in Nature (Biology and Mathematics);
- Journalism, Media, and Politics: The Art of Spin (Political Science and Mass Communications);
- Baseball in History, Literature, and Culture (English and History);
- Move to Learn (Kinesiology and Teacher Education);
- Success and You (Business and English); and
- Children and Families of Today (Psychology and Early Childhood Education).

**Undergraduate Research and Participation in Professional Conferences**

One of the most valuable types of student engagement that CMU offers its students is participation in a research project, an experience often reserved for graduate students on many campuses. The specifics vary by research focus and methods, usually established by the faculty member with whom the student collaborates, but in each case, a student learns how to apply their knowledge and skills to a specific problem and then often presents the results of their work in a professional setting. Last year, CMU recorded 653 research and 292 capstone registrations. The following illustrates the breadth of topics – from work in labs on campus to experiences “in the field” – in which undergraduates engaged:

- **Archaeology:** surveyed subsurface remains using metal detectors in the Indian War battlefield in the area of Rosebud Battlefield State Park in Montana that is prescribed for a future burn, as well as remapped a small prehistoric-to-historic buffalo jump in the vicinity.

- **Biological Sciences:**
  - Characterized DNA sequences from tamarisk beetles so as to better identify different species that can control the growth of tamarisk trees as part of water conservation efforts in the arid southwest because these plants consume large amounts of water.
  - Compared the gene sequences (DNA) of neurotoxin proteins found in the venom of rattlesnakes found in Western Colorado and presented results at the national conference of Ichthyologists and Herpetologists.

- **Business:** Conducted analyses of socio-demographic data associated with factors contributing to childhood hunger, identified solutions to address the problem, and presented the findings to representatives of the local school district and the Western Colorado Community Foundation who requested the research.

- **Chemistry:** Experimented with conversion of carbon dioxide into useful chemicals.

- **Computer Science:** Participated in the AgBot Challenge that applies technology to farming as part of a robotics competition. A drone scans and sends images of a field to a vehicle that follows and processes the information to determine if weeding is needed, if fertilizer should be applied, as well as if the crop is ripe.

- **Environmental Science:** Completed a fire history survey and revegetation restoration experiment on the Colorado National Monument.

- **Exercise Science:** Measured the metabolic efficiency of college-age cross-country skiers by measuring markers of exercise economy such as heart rate, lactate levels and maximum oxygen consumption.

- **Forensic Anthropology:** Compared findings from CMU’s Forensic Investigation Research Station with published accounts of decomposition from Arizona and Texas.

- **Geosciences:** Determined the timing of glacial deposits from the San Juan Mountains by studying the geomorphic and weathering characteristics of the deposits.

- **Kinesiology:** Presented two projects at the national meeting of the American College of Sports Medicine:
  - the effect of stride frequency on running economy in collegiate and recreational runners;
  - bone quality in weight- and non-weight-bearing sports in male collegiate athletes.
Mathematics: Completed a statistics project with a team in the National Football League by focusing on the concept of expected points, given combination of down and field position, to both fairly and effectively analyze the execution efficiency of the offense during the team’s time of possession.

Nursing and Kinesiology: Evaluated the usefulness of ice vests for pre-cooling of collegiate swimmers so as to slow the rise of body temperature.

Psychology: Examined the effects of social media on romantic relationships.

Presenting research results at a professional conference – be it statewide, regional, national, or international – is an opportunity often reserved for graduate students. Because numerous CMU undergraduates are involved in research projects, they frequently participate in one of the meetings sponsored by a professional association. In addition to those included in the competition section above, CMU students from a wide range of majors have also participated recently in the following conferences/competitions that include:

- **Art and Graphic Design**: OFFSET, an international design conference;
- **Chemistry**: national American Chemical Society conference;
- **Engineering**: Formula SAE, an international collegiate student competition organized by the Society of Automotive Engineers;
- **History**: the regional conference of the national History Honor Society, Phi Alpha Theta;
- **Music**: the American Choral Directors Association Conference;
- **Psychology**: the regional Rocky Mountain Psychological Association Conference;
- **Sports Medicine**: the national American College of Sports Medicine conference.

**Internships**

One of the most effective opportunities for applying the knowledge and skills learned in a major is through an internship. Last year, 456 registrations were reported by CMU for internship experiences. The recent implementation of the online platform, Handshake, connects students to local and national employers for internships, part-time work, or a job after graduation. The following is a sample of internship placements.

- Abercrombie & Fitch
- American Junior Golf Assn.
- Associates in Behav. Counseling
- Bureau of Land Management
- Center for Independence
- Cheyenne Mountain Zoo
- CO National Monument Museum
- CO State Parks & Wildlife
- CO State Insectary
- CO State Public Defenders Office
- Community Hospital
- Denver Center for Perf. Arts
- Elam Construction
- District Attorney's Office, 21st Judicial District
- Gold’s Gym
- Grand Junction Parks & Rec
- Grand Junction Rockies
- Harwood Museum of Art;
- Hilltop Life Adjustment Program
- Home Care of the Grand Valley
- Loki
- Mesa County Health Dept.
- Moltz Construction
- Mosaic in Western Colorado
- Museum of the West
- National Museum of Wildlife Art
- Nisley Elementary School
- Northern CO Plateau Network of the National Park Service
- Primary Care Partners
- Redstone Veterinary Clinic
- Reliant Energy Systems, Inc.
- Riverside Education Center
- Salvation Army-Men’s Rehabilitation Program
- St. Mary’s Hospital
- St. Mary’s Life Center
- Threshold Animation Studios
- Vail Adaptive Ski School
- Veteran’s Admin. Hospital
- West Middle School
- Yellowstone National Park Lodges.
International Experiences

Students interested in an opportunity to complete some type of experience in another country are encouraged to start planning for it no later than their sophomore year. International study can take many forms, such as an individual student enrolling in a university located in one of 52 countries through the International Student Exchange Program. It also could be a small group of students working on a research project in a foreign country with a CMU faculty member or those attending and/or participating in an international conference. The following illustrate some recent experiences:

- Biological Science undergraduates have been part of collaborative teams working to describe and sample the diversity of new species of Lepidoptera (e.g., butterflies) in the upper Amazon in Ecuador.

- Graphic Design students attended the OFFSET Design/Illustration Conference in Dublin, Ireland for professionals interested in Graphic Design, Photography, Animation, Illustration, Fashion, Film, Industrial Design and Art. In May 2018, students majoring in Animation, Film, Photography and Motion Design traveled to France and Italy.

- Psychology students will be volunteering with orphans and those who are physically/mentally disabled to teach them English in an afterschool program in Peru. One student has also raised enough money to purchase and donate 60 pairs of "Shoes that Grow" to an orphanage. The group is also traveling to various Peruvian sites that include Lake Titicaca, Machu Picchu, and Huayna Picchu, and then presenting their perspectives from the trip through an ethnographic study.

- Teacher Education students traveled to Cape Town, South Africa to present a paper on meaningful inclusion through community-building at the Division of International Special Education and Services (DISES) conference and then volunteered at the Aiden Rose Centre for children with disabilities for approximately ten days.

Service Learning

Student engagement can occur in less formal settings where students with a common interest come together, often times in support of a specific project and/or others in the community. Students who excel academically and, at the same time, give back to the CMU and/or local community through numerous volunteer activities, are recognized through the University's annual Who's Who program. Here are several examples.

- A candy apple red BMW, bubblegum pink roadster and baby blue convertible were among six powered vehicles that were rewired and modified for the Go Baby Go event by Engineering and Kinesiology students, working with Colorado Canyons Hospital and Medical Center therapists for six children with limited mobility.

- The Sustainability Council manages a student-run 800 square foot garden that feeds members of the campus community, operates a composting facility that converts University-generated food waste into a soil additive, provides recycling resources at campus events, and sponsors daily events during Earth Week. Its most recent initiative is the Move-Out Program, designed to reduce the amount of waste from CMU residence halls that end up in the landfill, and through which selected, discarded items are sold at a reduced cost to new students.

- The Social Work Club has been involved in building gardens with homeless teens, providing food to homeless shelters, working with vulnerable populations to create safe spaces, and fundraising for local charities.
Summer 2019 Courses – Preparation for 8 week summer term

Summer 2019 schedule

• One week off between spring and summer term
• Full 8 Week: May 28 to July 21
• First 4 Week: May 28 to June 23
• Second 4 Week: June 24 to July 21

For a traditional course, please use one of the three parts of term above.

For a nontraditional course, such as 1-2 week courses, ISED, AP program international travel, or other special cases, alternative parts of term may be needed. On the spreadsheet, choose “Special Case” and note the 2019 dates for the course. Please work with Holly Teal or Barbara Crane to discuss options.

Transition Plan

Unlike typical semester set up, the Registrar’s Office is not able to simply roll Summer 2018 to Summer 2019 and make desired edits. Instead, each course will need entered manually and assigned to the desired time frame for Summer 2019.

Phase 1 – Part of Term feedback due from academic departments by October 15, 2018 for all sections.

The Registrar’s Office downloaded the Summer 2018 schedule and entered suggested date range based on the length of the class in Summer 2018. This is found at:

R:\Registrar\Academic Departments\Course Schedule as “Summer 2019 Section List for Course Changes’

Please review your academic department. Once reviewed, email Academic Scheduling with your edits attached.

Phase 2 – Oct 15 to Dec 15 – Registrar’s Office will enter the courses into Banner. There will not be a way to run a report until all changes are entered.

Phase 3 – Normal edits will phase into the traditional review process in January/February 2019.

Please keep in mind that in order to change a part of term at a later date, the Registrar’s Office must delete the instructor, room, day/time, change the part of term, then enter the new day/time, room, and re-enter the instructor. If Academic Departments could have their best guess on the first attempt it would save time and effort.
<table>
<thead>
<tr>
<th>TERM</th>
<th>SUBJ</th>
<th>CRSE</th>
<th>TITLE</th>
<th>SECT</th>
<th>CAMPUS</th>
<th>INST</th>
<th>MTHD</th>
<th>Part of Term in Summer 2018</th>
<th>Part of Term in Summer 2019</th>
<th>CR</th>
<th>HR</th>
<th>2019 DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>101</td>
<td>General Human Biology-GTSC1</td>
<td>001</td>
<td>7 - ONLINE WEB</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>3</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>101L</td>
<td>General Human Biol Lab-GTSC1</td>
<td>001</td>
<td>7 - ONLINE WEB</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>1</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>105</td>
<td>Attri Living Systems-GTSC1</td>
<td>001</td>
<td>7 - ONLINE WEB</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>3</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>105L</td>
<td>Attri Living Syst Lab-GTSC1</td>
<td>001</td>
<td>7 - ONLINE WEB</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>3</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>201</td>
<td>Human Anatomy and Physiology</td>
<td>001</td>
<td>7 - MAIN CLASS</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>3</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>201L</td>
<td>Human Anatomy &amp; Physiology Lab</td>
<td>003</td>
<td>7 - MAIN CLASS</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>3</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>210</td>
<td>Human Anatomy/Physiology II</td>
<td>001</td>
<td>7 - MAIN CLASS</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>1</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>210L</td>
<td>Human Anat/Physiology II Lab</td>
<td>001</td>
<td>7 - MAIN CLASS</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>1</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>387</td>
<td>Structured Research</td>
<td>001</td>
<td>7 - MAIN EXP</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>1</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>387</td>
<td>Structured Research</td>
<td>002</td>
<td>7 - MAIN EXP</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>1</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>493</td>
<td>Lab Teaching Practicum</td>
<td>001</td>
<td>7 - MAIN EXP</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>1</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>499</td>
<td>Internship</td>
<td>001</td>
<td>7 - MAIN EXP</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>4</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>499</td>
<td>Internship</td>
<td>002</td>
<td>7 - MAIN EXP</td>
<td>1</td>
<td>Full Term</td>
<td>Full 8 weeks: 5/28/19-7/21/19</td>
<td>5</td>
<td>5/28 - 7/21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>496</td>
<td>Topics</td>
<td>001</td>
<td>7 - ONLINE WEB</td>
<td>4</td>
<td>First Session 1/3 Mod</td>
<td>First 4 weeks: 5/28/19-6/23/19</td>
<td>2</td>
<td>5/28 - 6/23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>BIOL</td>
<td>396</td>
<td>Topics</td>
<td>001</td>
<td>7 - ONLINE WEB</td>
<td>5</td>
<td>Second Session 1/3 Mod</td>
<td>Second 4 weeks: 6/24/19-7/21/19</td>
<td>2</td>
<td>6/24 - 7/21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Why Change Recap

- Align with best practices—simplicity is the key to investing
  - From 200 to 19, with target date funds
- Reduce fees currently paid by employees—recordkeeping services & investment fees
- Provide better advising to employees
- Improve plan performance monitoring and oversight

This will NOT impact employees in the PERA defined benefit plan or in the PERA 401k or 457 plans.
• Mandatory 401(a) Defined Contribution Plan (social security replacement)
  ✓ Employer 11.4%; employee 8.0%
• Voluntary 403(b) Tax Deferred Supplemental Plan
  ✓ 100% employee
• Mandatory Student Employee Plan
• This will NOT impact employees in the PERA defined benefit plan or in the PERA 401k or 457 plans.
Steps to date

- Board directed creation of stand-alone plan from Metro, Adams, Western in January
- Hired Insight Financial Solutions, local Grand Junction company
- Formed new CMU retirement committee—faculty, staff and admin. Representatives
- Committee has met five times
- Recordkeeper solicitation completed; interviewed four firms
- Reviewed Core investment line-up options
Tentative Recommendations to Board

- Hire TIAA as Recordkeeper (subject to successful conversion reference checks). Why?—less disruption to plan participants
- Approve core investment line-up
- Offer self-directed brokerage window to provide optional investments up to:
  - 401(a): 33% of participant’s plan funds
  - 403(b): 95% of participant’s plan funds
- Approve investment monitoring and termination procedures
- Board act on October 2-3
• Plan administration: holding, managing and reporting
• Fee continue to be paid by employee
• Currently, embedded in expense ratio

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIAA</td>
<td>0.16%</td>
<td>0.135%</td>
</tr>
<tr>
<td>Fidelity</td>
<td>0.15%</td>
<td></td>
</tr>
<tr>
<td>VALIC</td>
<td>0.55%</td>
<td></td>
</tr>
</tbody>
</table>

• Fee transparency in future
• Fee could drop further based on plan direction of Metro/Adams/Western
Core Investment Line-up Selection

• Chosen based on:
  ✓ Investment style
  ✓ Risk and risk-adjusted returns
  ✓ Investment performance
  ✓ Expenses
  ✓ Manager tenure
  ✓ Rating agency reports
  ✓ Fund size

• Recommended line-up: Morningstar rating of 4-5 stars (5 the best)
And, Here’s the Core Line-up

<table>
<thead>
<tr>
<th>ASSET CLASS</th>
<th>FUND</th>
<th>TICKER</th>
<th>EXPENSE RATIO</th>
<th>Current Exp Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Value</td>
<td>Vanguard Equity-Income Admiral</td>
<td>VEIRX</td>
<td>.17</td>
<td>.34 - .85</td>
</tr>
<tr>
<td>Large Blend</td>
<td>Vanguard 500 Index Admiral</td>
<td>VFIAX</td>
<td>.04</td>
<td>.04 - .83</td>
</tr>
<tr>
<td>Large Growth</td>
<td>T. Rowe Price Growth Stock I</td>
<td>PRUFX</td>
<td>.52</td>
<td>.26 - .85</td>
</tr>
<tr>
<td>Mid-Cap Blend</td>
<td>Vanguard Mid Cap Index Admiral</td>
<td>VIMAX</td>
<td>.05</td>
<td>.36 - 1.05</td>
</tr>
<tr>
<td>Small Value</td>
<td>Vanguard Small Cap Value Index Admiral</td>
<td>VSIAx</td>
<td>.07</td>
<td>.67 - 1.01</td>
</tr>
<tr>
<td>Small Growth</td>
<td>Janus Henderson Triton N</td>
<td>JGMNX</td>
<td>.67</td>
<td>.67 - 1.01</td>
</tr>
<tr>
<td>Allocation 50-70% equity</td>
<td>American Funds American Balanced R6</td>
<td>RLBGX</td>
<td>.28</td>
<td>.46 - .73</td>
</tr>
<tr>
<td>Foreign Large Value</td>
<td>American Beacon International Equity R6</td>
<td>AAERX</td>
<td>.66</td>
<td>.06 - 1.11</td>
</tr>
<tr>
<td>Foreign Large Blend</td>
<td>Vanguard Developed Markets Index Admiral</td>
<td>VTMGX</td>
<td>.07</td>
<td>.06 - 1.11</td>
</tr>
<tr>
<td>Foreign Large Growth</td>
<td>Vanguard International Growth Admiral</td>
<td>VWILX</td>
<td>.32</td>
<td>.06 - 1.11</td>
</tr>
<tr>
<td>Diversified Emerging Markets</td>
<td>Oppenheimer Developing Markets I</td>
<td>ODDVIX</td>
<td>.88</td>
<td>n/a</td>
</tr>
<tr>
<td>Specialty-Real Estate</td>
<td>TIAA-CREF Real Estate Sec Inst’l</td>
<td>TIREX</td>
<td>.51</td>
<td>.85</td>
</tr>
<tr>
<td>Guaranteed</td>
<td>TIAA Traditional Annuity</td>
<td>TBD</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Money Market</td>
<td>TIAA Traditional Annuity</td>
<td>TBD</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Intermediate Term Bond</td>
<td>Western Asset Core Bond IS</td>
<td>WACSX</td>
<td>.43</td>
<td>.05 - .77</td>
</tr>
<tr>
<td>High Yield Bond</td>
<td>Lord Abbett High Yield R6</td>
<td>LHYVX</td>
<td>.60</td>
<td>.77 - .96</td>
</tr>
<tr>
<td>World Bond</td>
<td>PGIM Global Total Return R6</td>
<td>PGTQX</td>
<td>.58</td>
<td>.64</td>
</tr>
<tr>
<td>Inflation Protected Bond</td>
<td>AB Bond Inflation Strategy Z</td>
<td>ABNZX</td>
<td>.50</td>
<td>.24 - .58</td>
</tr>
<tr>
<td>Socially Conscious</td>
<td>Vanguard FTSE Index Inv</td>
<td>VFTSX</td>
<td>.20</td>
<td>.27</td>
</tr>
<tr>
<td>Target Date Funds</td>
<td>American Funds Target Date Retirement R6</td>
<td>Various</td>
<td>.39 (average)</td>
<td>.68 - .97</td>
</tr>
</tbody>
</table>

COLORADO MESA UNIVERSITY
# Funds Scoring Example

<table>
<thead>
<tr>
<th>INVESTMENT</th>
<th>FUND ID</th>
<th>ASSETS</th>
<th>2Q18</th>
<th>1Q18</th>
<th>4Q17</th>
<th>3Q17</th>
<th>2Q17</th>
<th>1Q17</th>
<th>4Q16</th>
<th>3Q16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E American Funds American Mutual R4</td>
<td>RMFEX</td>
<td>-</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>E Fidelity® Equity-Income K</td>
<td>FDIKX</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>E TIAA-CREF Large-Cap Value Retail</td>
<td>TCPX</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>E VALIC Company I Broad Cap Value Income</td>
<td>VBCVX</td>
<td>-</td>
<td>6</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>E VALIC Company I Dividend Value</td>
<td>VCGX</td>
<td>-</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>E VALIC Company I Value</td>
<td>YAVAX</td>
<td>-</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>E VALIC Company II Large Cap Value</td>
<td>VACVX</td>
<td>-</td>
<td>11</td>
<td>12</td>
<td>10</td>
<td>10</td>
<td>12</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>E Vanguard Windsor™ II Inv</td>
<td>WWINX</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>P Vanguard Equity-Income Adm</td>
<td>VBRX</td>
<td>-</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Large Blend</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E CREF Equity Index R3</td>
<td>QGEQX</td>
<td>$50,000,000</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>E Dreyfus S&amp;P 500 Index</td>
<td>PEOPX</td>
<td>-</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>E Fidelity® 500 Index Premium</td>
<td>FUBVX</td>
<td>-</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>E Fidelity® Disciplined Equity K</td>
<td>FDQKX</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>E Fidelity® Growth &amp; Income K</td>
<td>FGKX</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>E MFS® Blended Research Core Equity R3</td>
<td>MUETX</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>E VALIC Company I Core Equity</td>
<td>VCEX</td>
<td>-</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>E VALIC Company I Growth &amp; Income</td>
<td>VCGAX</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>E VALIC Company I Large Cap Core</td>
<td>VLCX</td>
<td>-</td>
<td>6</td>
<td>7</td>
<td>10</td>
<td>9</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>E VALIC Company I Stock Index</td>
<td>VSIX</td>
<td>-</td>
<td>9</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>E VALIC Company II Socially Responsible</td>
<td>VCSRX</td>
<td>-</td>
<td>9</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>P Vanguard 500 Index Admiral</td>
<td>VFIAX</td>
<td>-</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>P Vanguard FTSE Social Index Inv</td>
<td>VFTSX</td>
<td>-</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: green is pass, red is fail.
Target Date Funds Options and Analysis

Figures shown are past results and are not predictive of results in future periods. Current and future results may be lower or higher than those shown. Share prices and returns will vary, so investors may lose money. Investing for short periods makes losses more likely.
Results shown are at net asset value. If the maximum sales charge had been deducted, results would have been lower.

<table>
<thead>
<tr>
<th></th>
<th>Net/Gross Expense Ratio</th>
<th>5-Year Annualized Returns</th>
<th>5-Year Total Return Percentile Rank</th>
<th>5-Year Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Funds Tgt Date Rtrmt R6</td>
<td>0.42</td>
<td>0.39</td>
<td>0.33</td>
<td>11.15</td>
</tr>
<tr>
<td>T. Rowe Price Retirement Inv</td>
<td>0.74</td>
<td>0.69</td>
<td>0.59</td>
<td>10.63</td>
</tr>
<tr>
<td>TIAA-CREF Lifecycle Instl</td>
<td>0.45/0.57</td>
<td>0.42/0.53</td>
<td>0.39/0.51</td>
<td>10.65</td>
</tr>
<tr>
<td>Vanguard Target Retirement Inv</td>
<td>0.15</td>
<td>0.14</td>
<td>0.13</td>
<td>9.95</td>
</tr>
<tr>
<td>Morningstar Category Average</td>
<td>0.85/3.47</td>
<td>0.83/3.47</td>
<td>0.74/6.26</td>
<td>9.15</td>
</tr>
</tbody>
</table>

Source: Morningstar. Returns as of 06/30/18 (updated monthly). Non-American Funds may include waivers and/or expense reimbursements, without which results would have been lower and expenses higher. Please refer to each fund's prospectus for details. Investment results assume all distributions are reinvested and reflect applicable fees and expenses. The expense ratios are as of each fund's prospectus available at the time of publication and include the weighted average expenses of the underlying funds. When applicable, investment results reflect expense reimbursements, without which results would have been lower. For more information on the American Funds fee waivers and expense reimbursements, visit americanfunds.com. See the Appendix for descriptions of Morningstar's ranking methodology.
Offer Self-Directed Brokerage Account

- Access to other trade investments (stocks, bonds, mutual funds)
- No additional cost to participant to access window.
- Individual participant plan assets up to:
  - 401(a): 33%
  - 403(b): 95%
What's Next (tentative)

- September campus informational meetings
- Board approval-October 2-3
- Oct, Nov, Dec—Recordkeeper engages in extensive participant communication
- Group and individual sessions
- January—employee enrollment window
- February—plan assets transfer to new lineup
Type of Contracts

**Group Contracts**
- Employee selects new Core investments
- If not, CMU map like-to-like or to new target date fund
- Employee can change thereafter

**Individual Contracts**
- Employee selects new Core investments
- If not, funds remain in old plan & old investment
- Employee can change thereafter

All new contributions after conversion made to new plan and new investments
If you have questions or feedback

- [https://www.coloradomesa.edu/human-resources/faculty-staff/retirement.html](https://www.coloradomesa.edu/human-resources/faculty-staff/retirement.html)
- Committee members (listed on above site)
- Kevin Price, Insight Financial Solutions
  - Office: (970) 986-4503, ext. 2
  - Mobile: (970) 201-6533
  - Fax: (866) 779-7925
  - E-mail: kevin.price@lpl.com
- TIAA contact information will be forthcoming in October.

They Keep Moving the Cheese.

Smell the Cheese Often so You Know It Is Getting Old.

Noticing Small Changes Early, Helps you to Adapt to The Bigger Changes That are Yet to Come.

The Quicker you Let Go of Old Cheese, the Sooner you Find New Cheese.

It is safer to search in the Maze, than Remain in a Cheeseless Situation.

Be Ready to Change Quickly and Enjoy Change Again and Again.

Who Moved My Cheese by Dr. Spencer Johnson