

PLEASE NOTE: Members, when addressing Faculty Council, please stand and identify yourselves. Guests wishing to speak please fill out a guest card to be handed to the Chair prior to speaking.

PLEASE NOTE: Members planning to introduce amendments are requested to provide copies to the Faculty Council Office, 18A Administration, at least 24 hours before this meeting.

AGENDA
Faculty Council Meeting
Tuesday, May 3, 2016 – 4:00 p.m. – A202 Clark Building

I. Faculty Council Agenda – May 3, 2016 – A202 Clark Building – 4:00 p.m.

A. ANNOUNCEMENTS

1. Next Faculty Council Meeting – September 6, 2016– A201 Clark Building - 4 p.m
2. Executive Committee Meeting Minutes located on FC website – March 22, 2016 (amended); March 29, 2016 (amended)
(<http://facultycouncil.colostate.edu/faculty-council-meeting-dates-agenda-minutes/>)
3. Graduate Student Council Advising Award – Anne Byrne
4. Harry Rosenberg Service Award – Announcement of Winner

B. MINUTES TO BE APPROVED

1. Faculty Council Meeting Minutes – April 5, 2016 (pp. 1-18)

C. UNFINISHED BUSINESS

1. Election –Faculty Council Standing Committee representatives – Committee on Faculty Governance (p. 19)

D. REPORTS TO BE RECEIVED

1. Provost/Executive Vice President – Rick Miranda
2. Faculty Council Chair – Mary Stromberger
3. Board of Governors Faculty Representative – Paul Doherty, Jr.

E. CONSENT AGENDA

1. UCC Minutes – March 25, 2016; April 1, April 8 and April 15, 2016 (pp. 20-63)

F. ACTION ITEMS

1. New Degree: PhD in Communication (*effective Fall 2017*) – UCC (pp. 64-68)
2. New CIOU: Center for Meaning and Purpose – CUP (pp. 69-87)
3. Revisions to the *Graduate and Professional Bulletin* – Application: U.S. Citizens or Permanent Residents – CoSRGE (pp. 88-89)
4. Proposed revisions to the *Graduate and Professional Bulletin* – Evaluation of Graduate Students and Graduate School Appeals Procedure – CoSRGE (p. 90)
5. Proposed revisions to Sections C2.8 and E4.2 of the *Academic Faculty and Administrative Professional Manual* – CoFG - (pp. 91-95)
6. Proposed revisions to the Preface of the *Academic Faculty and Administrative Professional Manual* – APC (p. 96)
7. Proposed revision to Section F.3.16 Parental Leave and Catastrophic Circumstances Leave of the *Academic Faculty and Administrative Professional Manual* – CoRSAF (pp. 97-99)
8. Proposed revision to Section F.3.17 Catastrophic Circumstances Leave of the *Academic Faculty and Administrative Professional Manual* – CoRSAF (pp. 100-102)
9. Proposed revision to Section E.9 of the *Manual* – CoRSAF - (pp. 103-104)

G. DISCUSSION

Secretary's Note: Please detach at this line, print your name, and leave in attendance box at the Faculty Council Meeting. If you must be absent, you are encouraged to send a substitute representative of academic faculty status in order to provide proper representation at the meeting. Substitutes should turn in the attendance slip at the meeting and indicate on the slip whom they are representing. Members will find it helpful to have copies of the Faculty Council, University Curriculum Committee and Executive Committee minutes available for reference at the meeting.

Page 1 - Faculty Council Meeting Minutes
April 5, 2016

To Faculty Council Members: Your critical study of these minutes is requested. If you find errors, please call, send a memorandum, or E-mail immediately to Rita Knoll, ext 1-5693.

NOTE: Final revisions are noted in the following manner: additions underlined; deletions ~~over-scored~~.

MINUTES
Faculty Council Meeting
Tuesday, April 5, 2016 – 4:00 p.m. – A202 Clark Building

CALL TO ORDER

The Faculty Council meeting was called to order at 4:00 p.m. by Mary Stromberger, Chair.

ANNOUNCEMENTS

1. Next Faculty Council Meeting – May 3, 2016 – A202 Clark Building – 4 p.m.

Stromberger announced that the next Faculty Council meeting would be held on May 3, 2016 at 4:00 p.m. in Room A202 Clark Building.

2. Executive Committee Meeting Minutes located on FC website –
February 16 and 23, 2016; March 8, 2016

(<http://facultycouncil.colostate.edu/faculty-council-meeting-dates-agendas-minutes/>)

Stromberger announced that the Executive Committee Meeting Minutes are posted on the FC website.

MINUTES TO BE APPROVED

1. Faculty Council Meeting Minutes – March 1, 2016

By unanimous consent, the minutes of the March 1, 2016 Faculty Council meeting were approved. The minutes will be placed on the FC website.

REPORTS TO BE RECEIVED

1. Provost/Executive Vice President – Rick Miranda

Miranda reported on the following:

- a. Still in negotiations for Dean of CLA. Hope to finish up this week.

Page 2 – Faculty Council Meeting Minutes
April 5, 2016

- b. Colorado Department Higher Education is pushing ahead with prior learning assessment (PLA) of AP and IB and other credits. CSU is considering giving such credit as well – and making transfer arrangements at least with sister institutions in the state.
- c. P & T decisions are in the President's Office.
- d. President Frank, Miranda and Stromberger are meeting with college FC reps. Halfway through the colleges. All have been good conversations, and surprisingly heterogeneous among the colleges in terms of the topics raised by faculty.
- e. Joint Budget Committee (JBC) presented a new budget proposal that would do away with cuts to higher education. Miranda is predicting flat appropriations. JBC is preserving the budgets of higher education in the state. The CCHE will distribute the funds using a formula, which will result in a \$140,000 cut to CSU, due to CSU's in-state residential enrollment not growing as fast as it is in other state-funded institutions.
- f. In addition to now having \$4 million back into our budget, Miranda found a few more million to add (e.g., reduced the proposed funding of a new cluster hire). Miranda freed up about \$7 million total. Miranda proposes that salary raises for faculty and AP's be raised from 1.5% to 1.8%. The DCP retirement will be increased by 0.5%; close to \$750,000. We had a 2% (~\$5 million) reallocation exercise; it will now be a 1.2% reallocation exercise for CSU (~\$3M). Will provide a little less than \$3million to invest. The last couple million will be allocated to a reserve for several purposes, including deferred maintenance, startup packages for new faculty hiring, and other program needs. In addition, this year's state appropriation budget scenarios will likely be repeated next year. So, will have a reserve for next year. (It may not be wise to deploy every single nickel this year, and then have to have a larger reallocation next year.)

Questions:

Bill Timpson (School of Education): Cluster hires?

Miranda: There were three new cluster hires last year that are being phased in over this year and next year. Cluster hires will add new faculty, and are not a cut in tenure track hires.

Jason Ahola (Agricultural Sciences): Are there Ag Experimental Station federal changes in budget?

Miranda: I don't know of anything at this time. They have a different fiscal calendar and the budgets are set by the federal government, not by CSU.

Robert Keller (Economics): Is there consideration for cutting the rate of tuition increase?

Miranda: Each percent is a million dollars. We are under mandate to go no higher than 6%. There may be some additional state funds that CSU will receive, that will have strings attached. This is related to House Bills 1420 and 1421. HB 1420 is to exempt Hospital Provider Fee from Tabor and HB 1421 proposes how the freed-up money is to

be spent, including to higher education. If these bills pass, CSU could receive additional funds, but only if we reduce the rate of tuition increase.

Mary Meyer (Statistics): How much is the subsidy to Athletics going to be? It increased by \$14 million over the years.

Miranda: Athletics will participate in the 1% reallocation exercise. They also made a budget proposal to fund other things; one is their food program. Miranda is reviewing all of the submitted budget requests and has not made a decision at this time on what proposals will be funded.

Meyer: No numbers?

Miranda: No. There is an increase in scholarship funds as well. A third thing, for example, our Commitment to Colorado. When we raise tuition, we raise aid as well, including scholarships for athletes.

Miranda's report was received.

2. Faculty Council Chair – Mary Stromberger

Stromberger reported on the following:

- a. Dr. Cori Wong is leading a new initiative, called the Women and Gender Collaborative. Through this collaborative many other organizations on campus will be connected together (President's Commission on Women and Gender, Women and Gender Advocacy Center, Center for Women's Studies and Gender Research, etc.). It is a way to network (re: women and gender issues) and events will also be promoted through the Collaborative.
- b. Monday, March 28th, an email went out to campus advertising the new faculty ombuds position. This is a 3-month assignment (0.25 FTE) with duties year 'round. Will be working with Lanai Greenhalgh in her office. This will be for a faculty person to help mediate and connect faculty with resources for conflict resolutions. CSU will provide training. For full consideration, applications are due April 11th.
- c. Stromberger reminded the Council about the Harry Rosenberg Faculty Council service award: please nominate colleagues. Maximum of 3 letters of support. Nominations are due by April 15 to Rita Knoll.
- d. President's evaluation--EC does it annually. Please send comments to your EC representative. Your comments will be confidential and will be forwarded to Paul Doherty. Doherty will prepare a draft of the letter and present to Executive Committee. Doherty will then send the evaluation summary to the Board of Governors.
- e. Stromberger continues to meet with the Housing Solutions Task Force. The task force is discussing potential short- and long-term housing solutions re: home ownership and

rental possibilities. If you are interested in the topic, have housing needs, or have a comment, please send to Stromberger.

- f. March 28th there was a Unizin panel meeting. Very interesting. A panel discussed what is going on with Unizin and how faculty and students can engage with Unizin.

Right now, faculty at each of the Unizin partner institutions are getting used to Unizin and Canvas. Next is getting faculty involved with another faculty member at another university; how can UNIZIN connect faculty together. Also, development of learning analytics tools is under discussion as well (e.g. ethical issues). If you are interested in the ethics of it, please talk with Gwen Gorzelsky, Director of TILT.

Don Estep (Natural Sciences/CoFG): We need a technical discussion rather than wishful thinking discussion. There is no statistical theory to support analytics related to student learning. A discussion on the statistical methods for analyzing data collected from learning analytics is needed.

- g. Another new committee is being formed: Campus Safety Advisory Committee. Committee comprised of CSU Police Department personnel and campus employee groups. Goal is to create transparency and encourage communication among groups about safety issues on campus re: crime. Chief Scott Harris provided information on the employee structure of the police department, training of CSU police officers, and how CSU collaborates with Fort Collins and Larimer County police departments. A big thank you to Jason Sydoriak (ASCSU) for spearheading this collaboration.
- h. Re-Envision CSU meeting: Discuss Re-Envision exercise. Quite a few suggestions have been submitted. We want to gather additional ideas. So, Twitter/FB and post cards to solicit comments will be developed, encouraging campus to share personal visions for CSU. Collect ideas with open forums in the fall. Themes will be identified for the future. There are several initiatives going on right now in Faculty Council that are independent of Re-Envision CSU but fit under its umbrella. For example, CoRSAF is working on service recognition and evaluation. We will have the discussion on evaluating teaching effectiveness today. The Committee on Non-Tenure Track Faculty is working on elevating the status of NTTF (e.g. career pathways). These initiatives speak to a new culture on campus. A lot of exciting things going on at CSU.
- i. College meeting-- see Miranda's report above. The meetings are restricted to FC reps and Standing Committee reps. Great discussions so far. Next meetings are in College of Business and College of Engineering.

Stromberger's report was received.

3. Board of Governors Faculty Representative – Paul Doherty, Jr.

- a. New BOG member and chair/vice chair have not been reappointed. The BOG will meet again in May.

Doherty's report was received.

CONSENT AGENDA

1. UCC Minutes –February 26, 2016; March 4, 2016

Carole Makela, Chair of University Curriculum Committee, moved that Faculty Council approve the consent agenda.

Makela's motion was unanimously approved.

ACTION ITEMS

1. Election –Faculty Council Standing Committee representatives – Committee on Faculty Governance

Steve Reising, Committee on Faculty Governance, moved that Faculty Council elect the following Faculty to Faculty Council Standing Committees:

BALLOT

Academic Faculty Nominations to Faculty Council Standing Committees

April 5, 2016

COMMITTEE ON NON-TENURE TRACK FACULTY

Term Expires

STEVE BENOIT

Natural Sciences

2019

(Nominated by Committee on Faculty Governance)

PATTY STUTZ-TANENBAUM

Health and Human Sciences

2019

(Nominated by Committee on Faculty Governance)

UNIVERSITY CURRICULUM COMMITTEE

ED DELOSH

Natural Sciences

2019

(Nominated by Committee on Faculty Governance)

COMMITTEE ON FACULTY GOVERNANCE

TROY OCHELTREE

WCNR

2019

(Nominated by Committee on Faculty Governance)

LEO VIJAYASARATHY

Business

2019

(Nominated by Committee on Faculty Governance)

COMMITTEE ON STRATEGIC AND FINANCIAL PLANNING

JOHN RIDLEY _____ WCNR 2019
(Nominated by Committee on Faculty Governance)

KATHARINE LEIGH _____ Health and Human Sciences 2019
(Nominated by Committee on Faculty Governance)

COMMITTEE ON LIBRARIES

JERRY MAGLOUGHLIN _____ WCNR 2019
(Nominated by Committee on Faculty Governance)

NANCY HUNTER _____ Libraries 2019
(Nominated by Committee on Faculty Governance)

COMMITTEE ON INTERCOLLEGIATE ATHLETICS

KEVIN CROOKS _____ WCNR 2019
(Nominated by Committee on Faculty Governance)

ANDREW SEIDL _____ Agricultural Sciences 2019
(Nominated by Committee on Faculty Governance)

COMMITTEE ON TEACHING AND LEARNING

SHAWN ARCHIBEQUE _____ Agricultural Sciences 2019
(Nominated by Committee on Faculty Governance)

RANDY BOONE _____ WCNR 2019
(Nominated by Committee on Faculty Governance)

ALBERT LUMINA _____ Business 2019
(Nominated by Committee on Faculty Governance)

MERINDA MCLURE _____ Libraries 2019
(Nominated by Committee on Faculty Governance)

BENJAMIN CLEGG _____ Natural Sciences 2019
(Nominated by Committee on Faculty Governance)

COMMITTEE ON SCHOLASTIC STANDARDS

<u>NEYDA GILMAN</u>	Libraries	2019
(Nominated by Committee on Faculty Governance)		

COMMITTEE ON UNIVERSITY PROGRAMS

<u>PATTY RETTIG</u>	Libraries	2019
(Nominated by Committee on Faculty Governance)		

COMMITTEE ON SCHOLARSHIP, RESEARCH AND GRADUATE EDUCATION

<u>GREGORY D. GRAFF</u>	Agricultural Sciences	2019
(Nominated by Committee on Faculty Governance)		

<u>ALLISON LEVEL</u>	Libraries	2019
(Nominated by Committee on Faculty Governance)		

Stromberger asked for nominations from the floor. Hearing no nominations, the nominations were closed.

Reising's motion was adopted and the Faculty were elected to three-year terms on their respective committees, starting July 1, 2016 through June 30, 2019.

2. Election – University Benefits Committee – Committee on Faculty

Steve Reising, Committee on Faculty Governance, moved that Faculty Council elect the following Faculty to the University Benefits Committee:

BALLOT
University Committee Nominations
UNIVERSITY BENEFITS COMMITTEE
(4-year term)
April 5, 2015

		Term Expires
<u>KIM HENRY</u>	Natural Sciences	Spring 2020
(Nominated by Committee on Faculty Governance)		
<u>HONG MIAO</u>	Business	Spring 2020
(Nominated by Committee on Faculty Governance)		

Stromberger asked for nominations from the floor. Hearing no nominations, the nominations were closed.

Reising's motion was adopted and Kim Henry (Natural Sciences) and Hong Miao (Business) were elected to four-year terms on the University Benefits Committee starting July 1, 2016 through June 30, 2020.

3. Freshman Accelerated Fresh Start Policy – Committee on Scholastic Standards

Liba Pejchar, Chair of Committee on Scholastic Standards, moved that Faculty Council approve the following revision to the General Catalog, Scholastic Standards:

Please note: additions underlined, deletions ~~overseored~~.

Freshman Accelerated Fresh Start

The Freshman Accelerated Fresh Start opportunity is available for first-time first-year students who finish their first semester at CSU with a GPA below 1.000.

1. Students who meet these eligibility criteria will have the following option:

- Leave the University for 1 – 3 semesters (the summer session is not included in this count)
- Reapply/return to CSU and begin earning a new cumulative GPA (first semester grades remain on the student's transcript but will not be calculated in their cumulative GPA)
- To return, a student must complete a returning student application accompanied by supplemental documentation that addresses a combination of factors, including evidence of maturity and/or academic success at another institution as well as their strengthened preparation for academic success at CSU.

2. Students are eligible for only one Fresh Start opportunity (regardless of whether it is a Freshman Accelerated Fresh Start or a standard Fresh Start)

3. First-time freshmen students who finish their first semester at CSU with a GPA below 1.000 and choose to continue to take courses at CSU in the next regular (fall, spring) semester will be eligible for only one semester on probation unless their term GPA in that semester is 2.000 or higher.

There was no discussion.

Pejchar's motion was unanimously approved, and the policy will be effective Fall 2017.

4. New Degree: Plan C Masters Program in the Department of Finance and Real Estate, College of Business – *Effective Fall 2016* – University Curriculum Committee

Carole Makela, Chair of University Curriculum Committee, moved that Faculty Council approve a new Plan C Masters Program in Finance, to be effective Fall 2016:

There was no discussion.

Makela's motion was approved. Final approval by the Board of Governors is pending.

DISCUSSION

1. Evaluating Teaching Effectiveness and Course Survey Redesign – Matt Hickey and Anton Betten

Stromberger provided the following introduction to the discussion topic of Evaluating Teaching Effectiveness and the Student Course Survey Redesign.

Background

- This began in Spring 2015, when Faculty Council first discussed the course survey.
- At the April 2015 Faculty Council meeting, discussion topic was led by Dan Turk, member of Committee on Teaching and Learning. Focused on research study that was done on student course surveys. Findings were that the current course survey suffered from issues of bias, reliability, validity, etc., including gender bias. Because of the issues, CoTL recommended that the course survey was not a proper tool for measuring teaching effectiveness.
- Led to development of a course survey redesign task force, led by Dr. Zinta Byrne, Department of Psychology; included members of CoTL and student rep from ASCSU.
- Task force conducted research, held an open forum last fall, and generated a set of recommendations to guide the re-design of the course survey.
- About the same time, and independently, a task force consisting of several UDTs and TILT (including Gwen Gorzelsky) began to discuss the language in the *Manual*, Section E.12.1.
- Language provides examples of tools to measure teaching effectiveness, but does not provide guidance on how to develop tools and use tools.
- So the UDTs/TILT task force worked to develop specific guidelines and recommendations for tools to evaluate teaching effectiveness.
- Both the UDTs/TILT report and Course Survey Recommendations were completed about the same time, in early spring, 2016.
- Although independent of each other, the two reports are linked in that they are both concerned with how teaching is evaluated as CSU, thus they are being discussed together.

Structure of Discussion

- Begin with a discussion on a vision for how teaching effectiveness should be evaluated. Umbrella topic under which course surveys are included as one of many tools to evaluate teaching effectiveness.
- Discussion will be led first by Matt Hickey, Department of Health and Human Sciences, UDTs, and member of Committee on Teaching and Learning.
- Report was prepared by a UDTs/TILT task force. The task force focused on evaluation practices that might be adapted for use in a wide range of disciplines. The goal was to share strategies and make recommendations that reflect an understanding that teaching practices and conditions vary widely across disciplines and that no single "one-size-fits-all" approach is likely to be appropriate for all departments.
- After Matt's introduction, we will open it up for a discussion and then we will move on to the discussion on the Course Survey Redesign.
- Anton Betten, Department of Mathematics and Chair of Committee on Teaching and Learning, will give a brief presentation on the recommendations for the course survey redesign.

Matt Hickey, Department of Health and Human Sciences and a University Distinguished Teaching Scholar, provided a short introduction and gave a summary of key findings/recommendations from the Evaluating Teaching Effectiveness report (included in agenda packet). Hickey explained that in 2011, CoTL asked UDTs to give input on language regarding teaching effectiveness for the *Manual*. The last year, we were building a toolbox about how to operationalize what was in the FC *Manual*. This report is a follow-up to that work. Hickey emphasized that this new report is a working document, not a final document. The toolbox is meant to reside under the Teaching and Learning tab at the TILT website. The discussion should continue. Hickey wants to listen and integrate feedback.

Bill Timpson (School of Education): There are some glaring problems with this document. Faculty teaching in different disciplines. Needs serious attention to have SUPPORT for effective teaching. At CSU, we should be having more emphasis on scholarship of teaching and learning. How are our courses working? More attention is needed to support CoTL and TILT, and publishing results of what is happening in classes. Again, cooperative learning is a big scholarly area, but not much is done to promote it.

Carole Makela (Chair, UCC): Why is the unit of analysis and unit of focus a COURSE?

Hickey: We limited the paper into that part of the tools of teaching. The "course" is only a slice of the pie. This is a working document, and a focus on courses is a starting point.

Margarita Lenk (COB): Faculty need more support on how to give peer evaluations. Peer evaluations can be negative if faculty has poor relationships with those who are reviewing their teaching.

Nancy Levinger (Guest, UDTs): The Task Force hoped that there would be resources available to address the above. Peer observation is only ONE tool discussed by the Task Force. We are looking for other methodologies. Recently, Carl Wyman – similar to a course survey (quantitative) – published this suggestion.

Margarita Lenk (COB): There are two bullets about peer evaluation and a word “should” was used. That is the objection by those in my college.

Mohammed Hirchi (Liberal Arts): What is being done to address gender bias in course surveys? How are you approaching the word “bias?” If you are good looking, you may get better evaluations. It is about relationships. Also, faculty with experience on survey creation should be on this Task Force. Content-based instruction should be considered, and the Task Force needs more discipline-specific reps. Currently there are no Liberal Arts faculty on the group that drafted this report.

Hickey: Agreed. It has to be a multi-factorial approach.

Francesca Cotrufo (Ag Sciences): How is peer review to happen?

Hickey explained that TILT has some resources to conduct peer reviews and can train department faculty to conduct peer reviews.

Don Estep (Natural Sciences/CoFG): Teaching is a craft; based on results primarily. University faculty are experts in their field. They do not have to have “educational formalism” – have education classes – to be a better instructor.

Nancy Levinger: There is a difference between “teaching” and “learning.” Learning is what students take with them; teaching is what we do as an effort to help students learn. In our teaching, we can facilitate learning, but we have no guaranteed results. We want our students to learn, but the Task Force considered how can we be good at “facilitating” that learning; how can we as teachers be most effective?

Don Estep: Who can say what is “effective”? I can make a judgement with some experience. Are you effective if students don’t learn? Effective doesn’t have to do with an outcome.

Eric Aoki (Department of Communication Studies, CLA): There is a lot of research on teaching effectiveness within the discipline of Communication Studies, and this research should be included in the report, along with references.

Hickey thanked Faculty Council for the discussion and asked Faculty Council to communicate with him further.

Following the discussion on Evaluating Teaching Effectiveness, Anton Betten, Chair of Committee on Teaching and Learning, gave an update on the Course Survey Redesign and presented Dr. Zinta Byrne's recommendations. Betten's PowerPoint presentation will be posted on the Faculty Council website.

Betten explained that the initiative to redesign the course survey was within CoTL. A report was made to Faculty Council last spring. CoTL outsourced the course survey to

Dr. Byrne, Department of Psychology. Betten reminded FC that this was a grassroots initiative from faculty, not administrators. CoTL needs feedback from FC to see if there is agreement to go forward with redesigning the course survey.

The Testing Center is running a deficit. ASCSU has pulled their financial support of the current course survey. During spring, the Survey Design Group has recommendations. Pilot the survey this fall. This is a complicated issue, including how to administer the survey as there are technical issues. There will need to be another infusion of funding to move forward. The Design Group had many recommendations. The course survey should not be used for annual evaluations. Improvement of teaching and course is between the student and teacher. The survey should be administered online; integrated to Canvas. Any technical issues would have to be resolved. Survey can be administered multiple times in a semester, allowing for mid-semester feedback as well as feedback after graduation. Confidential but not anonymous. Research shows if the survey is online, participation drops dramatically. That would have to be addressed with incentives. The survey will include a core of 10-15 questions, plus a suite of customizable questions. Survey will be behaviorally based.

The proposal has the unanimous support of CoTL and Jason Sydoriak (President of ASCSU). Want to move forward with FC support to move to implementation stage. There will still be discussions and stakeholder input. CoTL will organize a colloquium next fall to discuss teaching evaluations and course surveys. Phil Stark will be coming in the fall. Start this as a mini-colloquium series; please submit names to Betten with names of who to bring in. We need a grassroots movement – every department needs to do their homework: "What does it mean to be a good teacher?" Then department codes will be revised.

Tim Gallagher (COB): The big picture. More multiple measures and tools for teaching. We are going to have good data for department heads to use annual evaluations and P & T. I think there is a bigger change; we have to get the decision-makers to buy into this. It is easier to measure a faculty member on a 1-5 scale; one question on course survey. The message that this exercise sends is awful. We need to find a way to get department heads to buy in; deliver what we are talking about. The deans need to be involved. P & T Committees should be involved; challenged to use multiple tools.

Janice Moore (Natural Sciences): Is/will the ability of the consumers to use this be linked to the respondents? If you get low turnout on evaluations, will they carry as much weight as the 80% response rate currently received? I understand behavior will be part of the survey. What kind of behavior as there are many definitions of behavior?

Don Estep: It was an incredible disaster to put courses online at Georgia Tech. Only extremists responded. You run a risk of making a bad tool worse.

Betten: Where are we going to be in 10 years if we don't do something?

Zinta Byrne: More institutions are sharing good response rates with online surveys. It is no longer true anymore that online surveys have low response rates. Funds can be requested to support incentives.

Lori Peek (CLA): We focus on 3 hours/week of magic, but teaching is so much more. We need to make sure the student evaluations focus on the whole teaching experience, including outside the classroom (teacher availability, mentoring, etc.).

Zinta Byrne: Survey will consist of more than 10-15 questions. There will be a pool of validated questions, then you can pull in other items. You can include questions that address "what is going on outside the classroom." You can also look at bias and trending; more reliable and valid data.

Adrian Howkins (CLA): Expressed concern for the recommendation that course surveys NOT be used for P & T. If comments from students and survey results are good, why can't faculty use the data? Important especially for Assistant Professors to include positive student comments when going up for P & T.

Betten: You can use indirect information. You can use a memorandum of how you improved your teaching. You decide though rather than the department head choosing what to be submitted.

Margarita Lenk (COB): Did the UDTs provide references?

Zinta Byrne: All references are in an Excel spreadsheet.

Don Estep: You can't correct biases in a course survey.

Zinta Byrne: Analyses can be done to correct for biases.

Don Estep: You still get extremists who submit online surveys. We don't get thoughtful answers.

Page 14 – Faculty Council Meeting Minutes
April 5, 2016

Michael Pante (CoLA): If we are not considering it for P & T, why does anyone have to see them? Why can't they go directly to faculty? Also, the student comments (not the 1-5 ratings) provide me the best information on my teaching. I'm sure there are better ways to evaluate teaching and make changes in our teaching.

Bill Timpson (School of Education): I don't think there is anything more powerful than to open the conversation with the class with mid-semester feedback. If there is an issue of trust, you could bring in a third party. There needs to be conversation about learning and teaching.

Robert Keller (CoLA): Mid-semester feedback is incredible. All narrative.

Bill Timpson – Janice's point: In surveys, you get the nastiest responses. In class, with an open discussion, students and teacher can see it is a small minority.

Stromberger adjourned the meeting 5:50 p.m.

Mary Stromberger, Chair
Stephanie Clemons, Vice Chair
Rita Knoll, Executive Assistant

ATTENDANCE
BOLD INDICATES PRESENT AT MEETING
UNDERLINE INDICATES ABSENT AT MEETING

Agricultural Sciences

<u>Gregory Perry</u>	Agricultural and Resource Economics	2016
Stephen Coleman	Animal Sciences	2018
<u>Scott Nissen</u>	Bioagricultural Sciences & Pest Management	2018
Bradley Goetz	Horticulture & Landscape Architecture	2016
Francesca Cotrufo	Soil and Crop Sciences	2017
<u>Milt Thomas</u>	College-at-Large	2016
Jason Ahola	College-at-Large	2017

Health and Human Sciences

Stephanie Clemons	Design and Merchandising	2016
Brian Tracy	Health and Exercise Science	2018
David Sampson	Food Science and Human Nutrition	2016
Allison Bielak	Human Development and Family Studies	2018
(Substituting for Lisa Daunhauer – Sabbatical)		
Scott Glick	Construction Management	2017
Barb Hooper	Occupational Therapy	2017
William Timpson	School of Education	2018
(Substituting for Tom Chermak)		
Jennifer Portz	School of Social Work	2016

Business

Margarita Lenk	Accounting	2016
<u>Stephen Hayne</u>	Computer Information Systems	2018
Timothy Gallagher	Finance and Real Estate	2016
(Substituting for Patricia Ryan-Spring 2016-Sabbatical)		
Ray Hogler	Management	2018
(Substituting for Troy Mumford Fall 2015)		
<u>Tuba Ustuner</u>	Marketing	2018

Engineering

Russ Schumacher	Atmospheric Science	2018
Qiang (David) Wang	Chemical and Biological Engineering	2016
(Substituting for Travis Bailey – sabbatical)		
Rebecca Atadero	Civil and Environmental Engineering	2018
Steve Reising	Electrical and Computer Engineering	2016
<u>Azer Yalin</u>	Mechanical Engineering	2017
J. Rockey Luo	College-at-Large	2016
Jose Chavez	College-at-Large	2016
<u>Ted Watson</u>	College-at-Large	2018

Liberal Arts

Michael Pante	Anthropology	2017
Marius Lehene	Art	2017

Page 16 – Faculty Council Meeting Minutes
March 1, 2016

Elizabeth Williams	Communication Studies	2016
Robert Keller	Economics	2016
<u>Sue Doe</u>	English	2018
Ernesto Sagas	Ethnic Studies	2017
<u>Antonio Pedros-Gascon</u>	Languages, Literatures and Cultures	2018
Adrian Howkins	History	2017
Jangyul Kim	Journalism and Technical Communication	2017
Gary Moody	Music, Theater, and Dance	2016
TBD	Philosophy	2018
Kyle Saunders	Political Science	2018
Ken Berry	Sociology	2016
Eric Aoki	College-at-Large	2016
Mohammed Hirchi	College-at-Large	2017
Jared Orsi	College-at-Large	2018
Angela Christian	College-at-Large	2018
Lori Peek	College-at-Large	2018
Natural Resources		
<u>Monique Rocca</u>	Ecosystem Science and Sustainability	2017
Julie Savidge (thru Spring 2016)	Fish, Wildlife, & Conservation Biology	2016
Maria Fernandez-Gimenez	Forest and Rangeland Stewardship	2017
William Sanford	Geosciences	2017
<u>Stuart Cottrell</u>	HDNR in Warner College	2017
Natural Sciences		
<u>Tom Santangelo</u>	Biochemistry and Molecular Biology	2016
<u>Melinda Smith</u>	Biology	2018
George Barisas	Chemistry	2017
Ross McConnell	Computer Science	2016
<u>Iuliana Oprea</u>	Mathematics	2017
<u>Mingzhong Wu</u>	Physics	2017
Zinta Byrne	Psychology	2016
Mary Meyer	Statistics	2016
Ed DeLosh	College-at-Large	2017
<u>Christos Papadopoulos</u>	College-at-Large	2016
Janice Moore	College-at-Large	2018
<u>Brad Conner</u>	College-at-Large	2018
Alan Van Orden	College-at-Large	2018

Page 17 - Faculty Council Meeting Minutes
March 1, 2016

Veterinary Medicine & Biomedical Sciences

<u>Elaine Carnevale</u>	Biomedical Sciences	2016
<u>Howard Seim</u>	Clinical Sciences	2016
<u>Lucas Argueso</u>	Environmental & Radiological Health Sciences	2017
Jennifer McLean (Substituting for Alan Schenkel)	Microbiology, Immunology and Pathology	2018
Ryan Ferris	College-at-Large	2017
<u>Gerald Callahan</u>	College-at-Large	2017
<u>Pete Hellyer</u>	College-at-Large	2016
<u>David Gilkey</u>	College-at-Large	2016
<u>E.J. Ehrhart</u>	College-at-Large	2016
DN Rao Veeramachaneni	College-at-Large	2016
C.W. Miller	College-at-Large	2018
Stuart Tobet	College-at-Large	2018

University Libraries

Nancy Hunter	Libraries	2017
Daniel Draper (Substituting for Rachel Erb)	At-Large	2016

***Ex Officio* Voting Members**

Mary Stromberger	Chair, Faculty Council/Executive Committee	2016
Stephanie Clemons	Vice Chair, Faculty Council	2016
Paul Doherty, Jr.	BOG Faculty Representative	2016
Don Estep, Chair	Committee on Faculty Governance	2016
Todd Donavan, Chair	Committee on Intercollegiate Athletics	2016
Jerry Magloughlin, Chair	Committee on Libraries	2016
David Greene (Substituting for Jennifer Aberle)	Committee on Non-Tenure Track Faculty	2016
Bill Hanneman, Chair	Committee on Responsibilities & Standing of Academic Faculty	2016
Donald Samelson, Chair	Committee on Scholarship Research and Graduate Education	2016
Liba Pejchar, Chair	Committee on Scholastic Standards	2016
Katharine Leigh, Chair	Committee on Strategic and Financial Planning	2016
Anton Betten, Chair	Committee on Teaching and Learning	2016
Eric Prince, Chair	Committee on University Programs	2016
Carole Makela, Chair	University Curriculum Committee	2016

Ex-Officio Non-Voting Members

Anthony Frank	President
Rick Miranda	Provost/Executive Vice President
Brett Anderson	Vice President for Advancement
Mary Ontiveros	Vice President for Diversity
Louis Swanson	Vice Provost for Engagement/Director of Extension
Robin Brown	Vice President for Enrollment and Access
Dan Bush	Vice Provost for Faculty Affairs
Patrick Burns	Vice President for Information Technology/Dean Libraries
Jim Cooney	Vice Provost for International Affairs
Tom Milligan	Vice President for Public Affairs
Alan Rudolph	Vice President for Research
Blanche M. Hughes	Vice President for Student Affairs
David Gilkey (Interim)	Vice Provost for Undergraduate Affairs
Amy Parsons	Vice President for University Operations
Ajay Menon	Dean, College of Agricultural Sciences
Jeff McCubbin	Dean, College of Health and Human Sciences
Beth Walker	Dean, College of Business
David McLean	Dean, College of Engineering
Jodie Hanzlik	Dean, Graduate School
Ann Gill	Dean, College of Liberal Arts
Jan Nerger	Dean, College of Natural Sciences
Mark Stetter	Dean, College of Vet. Medicine & Biomedical Sciences
John Hayes	Dean, Warner College of Natural Resources
Toni-Lee Viney	Chair, Administrative Professional Council

BALLOT
Academic Faculty Nominations to Faculty Council Standing Committees
May 3, 2016

COMMITTEE ON INTERCOLLEGIATE ATHLETICS

<u>STEPHEN MILTON</u> (Nominated by Committee on Faculty Governance)	Engineering	Term Expires 2019
--	-------------	----------------------

COMMITTEE ON SCHOLARSHIP, RESEARCH AND GRADUATE EDUCATION

<u>SID SURYANARAYANAN</u> (Nominated by Committee on Faculty Governance)	Engineering	2019
--	-------------	------

COMMITTEE ON TEACHING AND LEARNING

<u>KARAN VENAYAGMOORTHY</u> (Nominated by Committee on Faculty Governance)	Engineering	2019
--	-------------	------

COMMITTEE ON LIBRARIES

<u>MAZDAK ARABI</u> (Nominated by Committee on Faculty Governance)	Engineering	2019
--	-------------	------

COMMITTEE ON STRATEGIC AND FINANCIAL PLANNING

<u>JEFF WILUSZ</u> (Nominated by Committee on Faculty Governance)	CVMBS	2019
---	-------	------

A regular meeting of the University Curriculum Committee was held on March 25, 2016, at 2:00 p.m.

Members present: Chair Carole Makela, Professors Ed DeLosh, Bradley Goetz, Mike Hogan, Paul Mallette, Beth Oehlerts, Brad Reisfeld, Howard Ramsdell, Sally Sutton, Graduate Representative Kevin Jablonski, Undergraduate representative Tyler Siri.

Curriculum Liaison Specialist: Shelly Ellerby.

Guests: Kelley Brundage.

Absent: David Gilkey (IVPUA, ex-officio).

Minutes

The Minutes of March 4, 2016 were approved.

Consent Agenda

The Consent Agenda was approved.

New Courses

Effective Term

ERHS 538 3(1-3-1). Geographic Information Systems and Health S.

Spring 2017

Prerequisite: ERHS 532.

Registration Information: Graduate standing. Must register for lecture, lab, and recitation.

Applications of geographic information systems (GIS) in public health. Topics include geographic theory, spatial data, cartography, data visualization, spatial analysis, geocoding, primary and secondary data acquisition, and application of GIS for epidemiologic analyses.

FW 577 3(2-0-1). Management of Wildlife Habitat S.

Spring 2017

Prerequisite: FW 260; GR 311 or GR 323/NR 323 or GR 420 or NR 319 or NR 322 or NR 422 or SOCR 377.

Registration Information: Written consent of instructor and admission to graduate program in Fish, Wildlife, and Conservation Biology. Must register for lecture and recitation. Credit allowed for only one of the following courses: FW 477, FW 577, or FW 677. Offered as an online course only.

Identifying and implementing management techniques for evaluating, classifying, and improving wildlife habitat to sustain and conserve populations.

GES 450 3(3-0-0). Global Sustainability and Health F, S.

Fall 2016

Prerequisite: GES 101.

Registration Information: Junior standing.

Impact of anthropogenic environmental change on human, animal and environmental health.

JTC 347 3(3-0-0). Audio Production and Editing As needed.

Spring 2017

Prerequisite: JTC 340.

Registration Information: Junior standing. Sections may be offered: Online.

Principles and practice of producing, recording, mixing and editing sound for films, television, and video.

JTC 363 3(3-0-0). Data Journalism As needed.

Spring 2017

Prerequisite: JTC 211.

Registration Information: Junior standing. Sections may be offered: Online.

Computer assisted journalistic reporting.

LB 386G Var[1-3]. Practicum—Event Production F, S, SS.

Spring 2017

Prerequisite: None.

Registration Information: None.

Practicum in producing for various on- and off-campus CSU-related events.

PBHL 570 3(3-0-0). Epidemiology for Public Health F.

Fall 2016

Prerequisite: None.

Registration Information: Graduate standing. Colorado School of Public Health students only.

Descriptive and analytic methods in epidemiology and their application to research and practice in the field of public health.

Study/Travel Abroad Courses

Effective Term

IE 382A 1(1-0-0). Study Abroad: Global Comm Engagement in Nicaragua S.

Spring 2017

Prerequisite: None.

Registration Information: None.

Exploration of the history and culture of Nicaragua. Fair trade processes, issues, and organizations.

[1st Offering]

SOWK 482A 3(1-2-0). Social Work in Costa Rica SS.

Summer 2016

Prerequisite: None.

Registration Information: Must register for lecture and recitation. Enrollment in Bachelor of Social Work or Master of Social Work degree program.

International social work practice through exposure to culturally diverse communities in Costa Rica. Examine social problems, social action, and social injustice in the context of global interdependence.

[1st Offering]

Major Change to Courses

Effective Term

ECOL 505 ~~32~~(2-0-10). Foundations of Ecology F.

Fall 2016

Prerequisite: LAND 220 or LIFE 220 or LIFE 320 or NR 220.

Registration Information: None.

Overview of the science of ecology; what questions are asked, how they are answered.

[credit hour change approved; course learning objectives still pending UCC review]

HES 340 ~~34~~(21-20-0). Exercise Prescription F, S, SS.

Spring 2017

Prerequisite: ~~None.~~ HES 145 (with a minimum grade of C) and FSHN 150 (with a minimum grade of C) and HES 207 (with a minimum grade of C) and BMS 300 (with a minimum grade of C).

Registration Information: ~~Must register for lecture and laboratory.~~

Theory and practice of exercise prescription for healthy individuals, cardiac patients, and other special populations: according to the American College of Sports Medicine (ACSM) guidelines. Includes the practice of proper lifting and spotting techniques, manipulation of training variables, and design of safe, effective, and efficient individual workout programs.

HES ~~355~~ 356 3(3-0-0). Integration of Health Behaviors ~~Wellness Programming~~ F, S.

Spring 2017

Prerequisite: ~~HES-386A:~~ HES 340 and HES 354.

Registration Information: ~~Must have completed 60 credits.~~

~~Assessment of wellness concerns and organizational problems, selection and implementation of program design.~~ Designed to guide students in applying their knowledge of health behavior change to individuals with various health challenges. Explores a variety of health topics including understanding stress and coping and managing stress, behavioral factors in chronic disease, and behavioral health.

HES 386A- 2(1-23-0). Practicum: Adult Fitness F, S, SS.

Spring 2017

Prerequisite: ~~HES 145 with a minimum grade of C and HES 240 and HES 332F and HES 332H and FSHN 150 with a minimum grade of C and HES 207 with a minimum grade of C and BMS 300 with a minimum grade of C. HES 232; HES 340 (with a minimum grade of C).~~

Registration Information: Must have taken the following courses and earned a cumulative 2.750 GPA in them: BMS 300, FSHN 150, HES 145, and HES 207; ~~HES 240; HES 332F; HES 332H.~~
 Must register for lecture and laboratory.
 Adult fitness.



New Graduate Certificate

College of Health and Human Sciences
 School of Social Work
 Graduate Certificate in Nonprofit Administration

Effective Spring 2017

Additional coursework may be required due to prerequisites.

Code	Title	Credits
Required Courses:		
<u>SOWK 660</u>	Nonprofit Program Development	3
<u>SOWK 661</u>	Nonprofit Financial Development	3
<u>SOWK 662</u>	Nonprofit Volunteer Development & Management	3
Program Total Credits		9

*This certificate may have courses in common with other graduate certificates. A person/student may earn more than one certificate, but a given course may be counted only in one certificate.



New Graduate Specializations

College of Engineering
 Department of Electrical and Computer Engineering
 Master of Engineering, Computer Engineering Specialization

Effective Fall 2016

Code	Title	Credits
Regular Courses ^{1,2}		30
Program Total Credits		30

- ¹ Courses not accepted as regular include all courses ending in the range -82 through -99. Select courses with approval of advisor.
- ² A maximum of 6 credit hours of 400-level undergraduate courses can be used towards the degree. Up to 8 credit hours at the 400-level are permitted when at least one course is a 4 credit course. Remaining credits must be in 500-level or higher courses.



**College of Engineering
 Department of Electrical and Computer Engineering
 Master of Engineering, Electrical Engineering Specialization**

Effective Fall 2016

Code	Title	Credits
Regular Courses ^{1,2}		30
Program Total Credits		30

¹ Courses not accepted as regular include all courses ending in the range -82 through -99. Select courses with approval of advisor.

² A maximum of 6 credit hours of 400-level undergraduate courses can be used toward the degree. Up to 8 credit hours at the 400-level are permitted when at least one course is a 4 credit course. Remaining credits must be in 500-level or higher courses.



New Doctoral Degree

**College of Liberal Arts
 Department of Communication Studies
 Ph.D. in Communication**

Effective Fall 2017

Students must have earned a Masters in Communication Studies. A maximum of 27 credits at the master's degree level may be accepted toward the Ph.D.

Code	Title	Credits
Master Degree Credit		27
The following prerequisite courses should be included/transferred in from the Masters degree: ¹		
<u>SPCM 601</u>	History of Rhetorical Theory	
<u>SPCM 612</u>	Rhetorical Criticism	
<u>SPCM 638</u>	Communication Research Methods	
<u>SPCM 639</u>	Communication Theory	
<u>SPCM 646</u>	Media Theory	
<u>SPCM 675</u>	Speech Communication Pedagogy	
Required PhD Courses		54
<u>SPCM 701</u>	Seminar in Academic Writing	3
<u>SPCM 702</u>	Professional Writing and Public Scholarship	3
<u>SPCM 712</u>	Critical/Cultural Analysis in Communication	3
<u>SPCM 793</u>	Seminar: Communications Research Methods	3
<u>SPCM 798</u>	Research	6
<u>SPCM 799</u>	Dissertation	12
SPCM Graduate Electives		24
Program Total Credits		81

A minimum of 81 credits are required to complete this program.

- ¹ If equivalent coursework is not transferred in as part of the Masters degree, each of these prerequisite courses must be completed in addition to the 54 credits required for the Ph.D.



New Undergraduate Certificate

College of Agricultural Sciences
 Department of Animal Sciences
 Undergraduate Certificate in Animal Nutrition

Effective Fall 2016

Code	Title	Credits
<u>ANEQ 345</u>	Principles of Nutrition: Equine Applications	3
<u>ANEQ 476</u>	Feedlot Systems	3
<u>ANEQ 420</u>	Applied Nutrition--Computer Diet Formulation	3
<u>ANEQ 487A</u> or <u>ANEQ 495</u>	Internship: Animal Independent Study	1
<u>BC 351</u>	Principles of Biochemistry	4
Program Total Credits		14



Major Change to Existing Programs

College of Business
 Master of Business Administration, Global Social and Sustainable Enterprise Specialization

Effective Fall 2016

Effective Fall 2014

First Year

Fall

Credits

<u>ACT 501</u>	Accounting for Global Sustainable Enterprise	3
Select 2 credits from the following:		2
<u>BUS 690A</u>	Contemporary Issues: Business	-
<u>BUS 690B</u>	Contemporary Issues: Grad Tutorials	-
<u>BUS 690C</u>	Contemporary Issues: Info Systems	-
<u>BUS 690D</u>	Contemporary Issues: Accounting	-
<u>BUS 690E</u>	Contemporary Issues: Global Enterprise	-
<u>BUS 690F</u>	Contemporary Issues: Finance	-
<u>BUS 690G</u>	Contemporary Issues: Government	-
<u>BUS 690H</u>	Contemporary Issues: Mgmt Practices	-
<u>BUS 614</u>	Accounting Concepts	2
<u>BUS 620</u>	Leadership and Teams	2
<u>BUS 636</u>	Economics of Ecosystems and Biodiversity	3
<u>CIS 600</u>	Information Technology and Project Management	3
<u>MGT 667</u>	Global Social Sustainable Entrepreneurship	3
<u>MKT 601</u>	Marketing for Social Sustainable Enterprises	3
Credits		13

25

University Curriculum Committee
March 25, 2016
Page 6

Spring

<u>BUS 601</u>	Quantitative Business Analysis	2
Select 1 credit from the following:		4
<u>BUS 690A</u>	Contemporary Issues: Business	-
<u>BUS 690B</u>	Contemporary Issues: Grad Tutorials	-
<u>BUS 690C</u>	Contemporary Issues: Info Systems	-
<u>BUS 690D</u>	Contemporary Issues: Accounting	-
<u>BUS 615</u>	Managerial Accounting	2
<u>BUS 686</u>	Practicum	1
<u>BUS 690E</u>	Contemporary Issues: Global Enterprise	1
<u>BUS 690F</u>	Contemporary Issues: Finance	-
<u>BUS 690G</u>	Contemporary Issues: Government	-
<u>BUS 690H</u>	Contemporary Issues: Mgmt Practices	-
<u>FIN 601</u>	Financial Management and Markets	3
<u>MGT 665</u>	Supply Chain Development and Management	2
<u>MGT 668</u>	New Venture Development for Social Enterprise	3
<u>MKT 601</u>	Marketing for Social Sustainable Enterprises	3
Credits		14

Summer

<u>BUS 686 or 687</u>	Practicum Internship	3
Credits		0

Second Year

Fall

<u>BUS 505</u>	Legal and Ethical Environment of Business	3
Select 3 credits from the following:		3
<u>BUS 690A</u>	Contemporary Issues: Business	-
<u>BUS 690B</u>	Contemporary Issues: Grad Tutorials	-
<u>BUS 690C</u>	Contemporary Issues: Info Systems	-
<u>BUS 690D</u>	Contemporary Issues: Accounting	-
<u>BUS 690E</u>	Contemporary Issues: Global Enterprise	-
<u>BUS 690F</u>	Contemporary Issues: Finance	-
<u>BUS 690G</u>	Contemporary Issues: Government	-
<u>BUS 690H</u>	Contemporary Issues: Mgmt Practices	-
<u>BUS 686</u>	Practicum	2
<u>FIN 669</u>	Financing, Evaluating Sustainable Enterprise	3
<u>MGT 612</u>	Managing in a Global Context	3
<u>MGT 668</u>	New Venture Development for Social Enterprise	3

Credits **14**

Program Total Credits **41**

A minimum of 41 ~~40~~ credits are required to complete this program.



Warner College of Natural Resources
Department of Fish, Wildlife, and Conservation Biology
Master of Fish, Wildlife, and Conservation Biology, Plan C

Effective Fall 2016

Effective Fall 2016 ~~2005~~

Code	Title	Credits
Select 24 credits from graded courses 500-level and above		24

Select 12 credits from seminars and graded courses 300-level and above		12
--	--	----

Program Total Credits		0
------------------------------	--	----------

Code	Title	Credits
------	-------	---------

Core Courses

<u>FW 551</u>	<u>Design of Fish and Wildlife Studies</u>	<u>3</u>
---------------	--	----------

<u>FW 552</u>	<u>Applied Sampling for Wildlife/Fish Studies</u>	<u>3</u>
---------------	---	----------

<u>FW 555</u>	<u>Conservation Biology</u>	<u>3</u>
---------------	-----------------------------	----------

<u>FW 564</u>	<u>Science of Managing Human-Wildlife Conflicts</u>	<u>3</u>
---------------	---	----------

<u>FW 578</u>	<u>Conservation Decision Analysis</u>	<u>3</u>
---------------	---------------------------------------	----------

<u>FW 692</u>	<u>Seminar: Fish, Wildlife, and Conservation Biology</u> ¹	<u>0-3</u>
---------------	---	------------

<u>FW 696</u>	<u>Group Study: Fish, Wildlife, Conservation Biology</u> ¹	<u>0-3</u>
---------------	---	------------

<u>NR 515</u>	<u>Natural Resources Policy and Biodiversity</u>	<u>3</u>
---------------	--	----------

<u>Core Total Credits</u>		<u>21</u>
---------------------------	--	-----------

Select at least 9 additional credits from the following:		<u>9</u>
--	--	----------

<u>FW 556</u>	<u>Leopold's Ethic for Wildlife and Land</u>	
---------------	--	--

<u>FW 576</u>	<u>Wildlife Policy, Administration, and Law</u>	
---------------	---	--

<u>NR 501</u>	<u>Leadership and Public Communications</u>	
---------------	---	--

<u>STAT 511</u>	<u>Design and Data Analysis for Researchers I</u>	
-----------------	---	--

<u>STAT 512</u>	<u>Design and Data Analysis for Researchers II</u>	
-----------------	--	--

<u>STAT 547</u>	<u>Statistics for Environmental Monitoring</u>	
-----------------	--	--

Program Total Credits		30
------------------------------	--	-----------

A minimum of 30 ~~36~~ credits are required to complete this program.

¹ Complete 3 credits total of FW 692 and/or FW 696.



College of Natural Sciences
Department of Physics
Major in Physics, Applied Physics Concentration

Effective Fall 2016

Effective Fall 2016 2008

Majors must achieve a minimum grade of C- in all specific courses listed in the Core Program for freshman and sophomore years, in CO 301B and CO 300, in all CSU physics, mathematics, and technical elective courses which are used to meet requirements for the degree.

Each course used to meet requirements of the degree need a minimum grade of C-, including courses to satisfy AUCC Categories 1, 2, and 3A.

FRESHMAN

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
Select 3-4 credits from the following:		-	<u>3-4</u>
<u>CS 155</u>	Introduction to Unix		
<u>CS 156</u>	Introduction to C Programming I		
<u>CS 157</u>	Introduction to C Programming II		
<u>CS 160</u>	Foundations in Programming		
<u>MATH 160</u>	Calculus for Physical Scientists I (GT-MA1)	1B	4
<u>MATH 161</u>	Calculus for Physical Scientists II (GT-MA1)	1B	4
<u>PH 141</u>	Physics for Scientists and Engineers I (GT-SC1)	3A	5
<u>PH 142</u>	Physics for Scientists and Engineers II (GT-SC1)	3A	5
Elective		-	6
<u>Arts and Humanities</u>		<u>3B</u>	<u>6</u>
Total Credits			30-31

SOPHOMORE

<u>CHEM 111</u>	General Chemistry I (GT-SC2)	3A	4
<u>CHEM 112</u>	General Chemistry Lab I (GT-SC1)	3A	1
<u>MATH 261</u>	Calculus for Physical Scientists III		4
Select one from the following:			4
<u>MATH 340</u>	Introduction to Ordinary Differential Equations		
<u>MATH 345</u>	Differential Equations		
<u>PH 245¹</u>	Introduction to Electronics		3
<u>PH 293</u>	Selected Topics in Physics		1
<u>PH 314</u>	Introduction to Modern Physics		4
<u>PH 315</u>	Modern Physics Laboratory		2
<u>Arts and Humanities</u>		<u>3B</u>	<u>3</u>
<u>Social and Behavioral Sciences</u>		<u>3C</u>	<u>3</u>
Elective		-	<u>2</u>

28

University Curriculum Committee
March 25, 2016
Page 9

<u>Historical Perspectives</u>	<u>3D</u>	<u>3</u>
Total Credits		29

JUNIOR

Select one from the following: ²		<u>3</u>
<u>CHEM 301</u>	<u>Advanced Scientific Writing--Chemistry (GT-CO3)</u>	<u>2</u>
<u>CO 300</u>	<u>Writing Arguments (GT-CO3)</u>	<u>2</u>
<u>CO 301B</u>	<u>Writing in the Disciplines: Sciences (GT-CO3)</u>	<u>2</u>
<u>LB 300</u>	<u>Specialized Professional Writing</u>	<u>2</u>
<u>PH 341</u>	<u>Mechanics</u>	<u>4</u>
<u>PH 351¹</u>	<u>Electricity and Magnetism</u>	<u>4</u>
<u>PH 353</u>	<u>Optics and Waves</u>	<u>4</u>
<u>PH 361</u>	<u>Physical Thermodynamics</u>	<u>3</u>
<u>Arts and Humanities</u>	<u>3B</u>	<u>3</u>
Select either		<u>9</u>
<u>PH 327</u>	<u>Analytical Techniques for Physics</u>	-
<u>Electives</u>		-
Or		-
<u>Technical Electives List 1 (select a minimum of 3 credits)</u>		-
<u>Technical Electives List 2 (select a minimum of 3 credits)</u>		-
<u>Electives</u>		-

<u>Global and Cultural Awareness</u>	<u>3E</u>	<u>3</u>
<u>Historical Perspectives</u>	<u>3D</u>	<u>3</u>
<u>Electives</u>	-	<u>3</u>
Total Credits		30

SENIOR

<u>PH 425</u>	<u>Advanced Physics Laboratory</u>	<u>4C</u>	<u>2</u>
<u>PH 451</u>	<u>Introductory Quantum Mechanics I</u>	<u>4A,4B</u>	<u>3</u>
<u>PH 492</u>	<u>Seminar</u>	<u>4C</u>	<u>1</u>
<u>Technical Electives⁺</u>		-	<u>48</u>
<u>Electives²</u>		-	<u>5</u>
Select one Field from the lists below (Select a minimum of 12 credits from a minimum of four courses) ¹		-	<u>12</u>
<u>Electives⁴</u>		-	<u>12-13</u>
Total Credits			30-31

Program Total Credits: 120

Technical Electives List 1 (select a minimum of 3 credits not taken elsewhere in the program)

Code	Title	Credits
<u>AA 301</u>	Astrophysics I	5
<u>AA 302</u>	Astrophysics II	5
<u>AA 303</u>	Astrophysics III	5
<u>BC 411</u>	Physical Biochemistry	4
<u>CBE 331</u>	Momentum Transfer and Mechanical Separations	3
<u>CBE 332</u>	Heat and Mass Transfer Fundamentals	3
<u>CHEM 113</u>	General Chemistry II	3
<u>CHEM 114</u>	General Chemistry Lab II	1
<u>CHEM 245</u>	Fundamentals of Organic Chemistry	4
<u>CHEM 341</u>	Modern Organic Chemistry I	3
<u>CHEM 343</u>	Modern Organic Chemistry II	3
<u>CHEM 345</u>	Organic Chemistry I	4
<u>CHEM 346</u>	Organic Chemistry II	4
<u>CHEM 461</u>	Inorganic Chemistry	3
<u>CHEM 474</u>	Physical Chemistry I	3
<u>CHEM 476</u>	Physical Chemistry II	3
<u>CIVE 300</u>	Fluid Mechanics	3
<u>CIVE 301</u>	Fluid Mechanics Laboratory	1
<u>CS 253</u>	Software Development with C++	4
<u>CS 410</u>	Introduction to Computer Graphics	4
<u>CS 440</u>	Introduction to Artificial Intelligence	4
<u>CS 475</u>	Parallel Programming	4
<u>ECE 312</u>	Linear System Analysis II	3
<u>ECE 331</u>	Electronics Principles I	4
<u>ECE 332</u>	Electronics Principles II	4
<u>ECE 404</u>	Experiments in Optical Electronics	2
<u>ECE 441</u>	Optical Electronics	3
<u>ECE 444</u>	Antennas and Radiation	3
<u>ECE 471A</u>	Semiconductor Physics	1
<u>ECE 471B</u>	Semiconductor Junctions	1
<u>ECE 507</u>	Plasma Physics and Applications	3
<u>ECE 546</u>	Laser Fundamentals and Devices	3
<u>ERHS 450</u>	Introduction to Radiation Biology	3
<u>ERHS 530</u>	Radiological Physics and Dosimetry I	3
<u>ERHS 531</u>	Nuclear Instruments and Measurements	2
<u>GEO 578</u>	Global Seismology	4

Code	Title	Credits
<u>MATH 317</u>	Advanced Calculus of One Variable	4
<u>MATH 332</u>	Partial Differential Equations	3
<u>MATH 366</u>	Introduction to Abstract Algebra	3
<u>MATH 369</u>	Linear Algebra I	3
<u>MATH 405</u>	Introduction to Number Theory	3
<u>MATH 419</u>	Introduction to Complex Variables	3
<u>MATH 450</u>	Introduction to Numerical Analysis I	3
<u>MATH 451</u>	Introduction to Numerical Analysis II	3
<u>MATH 466</u>	Abstract Algebra I	3
<u>MATH 467</u>	Abstract Algebra II	3
<u>MATH 470</u>	Euclidean and Non-Euclidean Geometry	3
<u>MATH 472</u>	Introduction to Topology	3
<u>MATH 474</u>	Introduction to Differential Geometry	3
<u>MECH 331</u>	Introduction to Engineering Materials	4
<u>MECH 344</u>	Heat and Mass Transfer	3
<u>MECH 460</u>	Aeronautics	3
<u>MECH 468</u>	Space Propulsion and Power Engineering	3
<u>PH 517</u>	Chaos, Fractals, and Nonlinear Dynamics	3
<u>PH 521</u>	Introduction to Lasers	3
<u>PH 522</u>	Introductory Laser Laboratory	1
<u>PH 531</u>	Introductory Solid State Physics	3
<u>PH 561</u>	Elementary Particle Physics	3
<u>PH 571</u>	Mathematical Methods for Physics I	3
<u>PH 572</u>	Mathematical Methods for Physics II	3
<u>STAT 315</u>	Statistics for Engineers and Scientists	3
<u>STAT 321</u>	Elementary Probabilistic-Stochastic Modeling	3
<u>STAT 340</u>	Multiple Regression Analysis	3
<u>STAT 420</u>	Probability and Mathematical Statistics I	3
<u>STAT 421</u>	Introduction to Stochastic Processes	3
<u>STAT 430</u>	Probability and Mathematical Statistics II	3
<u>STAT 460</u>	Applied Multivariate Analysis	3

Technical Electives List 2 (select a minimum of 3 credits not taken elsewhere in the program)

Code	Title	Credits
<u>AA 301</u>	Astrophysics I	5
<u>AA 302</u>	Astrophysics II	5
<u>AA 303</u>	Astrophysics III	5
<u>CHEM 113</u>	General Chemistry II	3

University Curriculum Committee

March 25, 2016

Page 12

Code	Title	Credits
<u>CHEM 114</u>	General Chemistry Lab II	1
<u>CIVE 300</u>	Fluid Mechanics	3
<u>CIVE 301</u>	Fluid Mechanics Laboratory	1
<u>ECE 507</u>	Plasma Physics and Applications	3
<u>MATH 317</u>	Advanced Calculus of One Variable	4
<u>MATH 332</u>	Partial Differential Equations	3
<u>MATH 366</u>	Introduction to Abstract Algebra	3
<u>MATH 369</u>	Linear Algebra I	3
<u>MATH 405</u>	Introduction to Number Theory	3
<u>MATH 419</u>	Introduction to Complex Variables	3
<u>MATH 450</u>	Introduction to Numerical Analysis I	3
<u>MATH 451</u>	Introduction to Numerical Analysis II	3
<u>MATH 466</u>	Abstract Algebra I	3
<u>MATH 467</u>	Abstract Algebra II	3
<u>MATH 470</u>	Euclidean and Non-Euclidean Geometry	3
<u>MATH 472</u>	Introduction to Topology	3
<u>MATH 474</u>	Introduction to Differential Geometry	3
<u>MECH 331</u>	Introduction to Engineering Materials	4
<u>MECH 344</u>	Heat and Mass Transfer	3
<u>MECH 468</u>	Space Propulsion and Power Engineering	3
<u>PH 498</u>	Research	1-6
<u>PH 517</u>	Chaos, Fractals, and Nonlinear Dynamics	3
<u>PH 521</u>	Introduction to Lasers	3
<u>PH 522</u>	Introductory Laser Laboratory	1
<u>PH 531</u>	Introductory Solid State Physics	3
<u>PH 561</u>	Elementary Particle Physics	3
<u>PH 571</u>	Mathematical Methods for Physics I	3
<u>PH 572</u>	Mathematical Methods for Physics II	3
<u>STAT 315</u>	Statistics for Engineers and Scientists	3
<u>STAT 321</u>	Elementary Probabilistic-Stochastic Modeling	3
<u>STAT 340</u>	Multiple Regression Analysis	3
<u>STAT 420</u>	Probability and Mathematical Statistics I	3
<u>STAT 421</u>	Introduction to Stochastic Processes	3
<u>STAT 430</u>	Probability and Mathematical Statistics II	3
<u>STAT 460</u>	Applied Multivariate Analysis	3

Biophysics Field

Code	Title	Credits
<u>BC 351</u>	Principles of Biochemistry	4
<u>BC 411</u>	Physical Biochemistry	4
<u>BC 463</u>	Molecular Genetics	3
<u>BC 464</u>	Molecular Genetics Recitation	1
<u>BC 465</u>	Molecular Regulation of Cell Function	3
<u>BC 467</u>	Biochemistry of Disease	3
<u>BIOM 330</u>	Transport Phenomena in Biomedical Engineering	3
<u>BIOM 422</u>	Kinetics of Biomolecular and Cellular Systems	3
<u>BIOM 441</u>	Biomechanics and Biomaterials	3
<u>BIOM 470</u>	Biomedical Engineering	3
<u>BIOM 526</u>	Biological Physics	3
<u>BZ 310</u>	Cell Biology	4
<u>CHEM 433</u>	Clinical Chemistry	3
<u>ERHS 450</u>	Introduction to Radiation Biology	3
<u>ERHS 530</u>	Radiological Physics and Dosimetry I	3
<u>ERHS 531</u>	Nuclear Instruments and Measurements	2
<u>ERHS 550</u>	Principles of Radiation Biology	5
<u>MIP 300</u>	General Microbiology	3
<u>MIP 450</u>	Microbial Genetics	3

Chemistry Field³

Code	Title	Credits
<u>BC 351</u>	Principles of Biochemistry	4
<u>BC 401</u>	Comprehensive Biochemistry I	3
<u>BC 403</u>	Comprehensive Biochemistry II	3
<u>BC 404</u>	Comprehensive Biochemistry Laboratory	2
<u>BC 411</u>	Physical Biochemistry	4
<u>CHEM 245</u>	Fundamentals of Organic Chemistry	4
<u>CHEM 246</u>	Fundamentals of Organic Chemistry Laboratory	1
<u>CHEM 261</u>	Fundamentals of Inorganic Chemistry	3
<u>CHEM 335</u>	Introduction to Analytical Chemistry	3
<u>CHEM 341</u>	Modern Organic Chemistry I	3
<u>CHEM 343</u>	Modern Organic Chemistry II	3
<u>CHEM 344</u>	Modern Organic Chemistry Laboratory	2
<u>CHEM 345</u>	Organic Chemistry I	4
<u>CHEM 346</u>	Organic Chemistry II	4
<u>CHEM 440</u>	Advanced Organic Chemistry Laboratory	2

Code	Title	Credits
<u>CHEM 461</u>	Inorganic Chemistry	3
<u>CHEM 462</u>	Inorganic Chemistry Laboratory	2
<u>CHEM 474</u>	Physical Chemistry I	3
<u>CHEM 475</u>	Physical Chemistry Laboratory I	1
<u>CHEM 476</u>	Physical Chemistry II	3
<u>CHEM 477</u>	Physical Chemistry Laboratory II	1

Computers Field³

Code	Title	Credits
<u>CS 200</u>	Algorithms and Data Structures	4
<u>CS 253</u>	Software Development with C++	4
<u>CS 270</u>	Computer Organization	4
<u>CS 314</u>	Software Engineering	3
<u>CS 320</u>	Algorithms--Theory and Practice	3
<u>CS 356</u>	Systems Security	3
<u>CS 370</u>	Operating Systems	3
<u>CS 410</u>	Introduction to Computer Graphics	4
<u>CS 414</u>	Object-Oriented Design	4
<u>CS 420</u>	Introduction to Analysis of Algorithms	4
<u>CS 430</u>	Database Systems	4
<u>CS 435</u>	Introduction to Big Data	4
<u>CS 440</u>	Introduction to Artificial Intelligence	4
<u>CS 453</u>	Introduction to Compiler Construction	4
<u>CS 454</u>	Principles of Programming Languages	4
<u>CS 455</u>	Introduction to Distributed Systems	4
<u>CS 457</u>	Computer Networks and the Internet	4
<u>CS 470</u>	Computer Architecture	4
<u>CS 475</u>	Parallel Programming	4
<u>ECE 251</u>	Introduction to Microprocessors	4
<u>ECE 423</u>	DSP for Communications	3
<u>ECE 450</u>	Digital System Design Laboratory	1
<u>ECE 451</u>	Digital System Design	3
<u>ECE 452</u>	Computer Organization and Architecture	3
<u>ECE 454</u>	Database Computers	3
<u>ECE 456</u>	Computer Networks	4
<u>MATH 360</u>	Mathematics of Information Security	3
<u>MATH 460</u>	Information and Coding Theory	3

Custom Field³

Specific courses forming a coherent program are selected by the student in consultation with their academic advisor and subject to approval of the Key Advisor. Only 3 credits from each AA and CS course counts towards the 12 credit requirement.

Electronics, Semiconductors, and Optics Field

Code	Title	Credits
<u>ECE 311</u>	Linear System Analysis I	3
<u>ECE 312</u>	Linear System Analysis II	3
<u>ECE 331</u>	Electronics Principles I	4
<u>ECE 332</u>	Electronics Principles II	4
<u>ECE 404</u>	Experiments in Optical Electronics	2
<u>ECE 411</u>	Control Systems	4
<u>ECE 412</u>	Digital Control and Digital Filters	3
<u>ECE 421</u>	Telecommunications I	3
<u>ECE 422</u>	Telecommunications II	3
<u>ECE 430</u>	Fourier and Wavelet Analysis with Apps	3
<u>ECE 441</u>	Optical Electronics	3
<u>ECE 444</u>	Antennas and Radiation	3
<u>ECE 457</u>	Fourier Optics	3
<u>ECE 471A</u>	Semiconductor Physics	1
<u>ECE 471B</u>	Semiconductor Junctions	1
<u>ECE 472</u>	MOS Integrated Circuits	3
<u>ECE 546</u>	Laser Fundamentals and Devices	3

Geophysics Field³

Code	Title	Credits
<u>CIVE 413</u>	Environmental River Mechanics	3
<u>GEOL 232</u>	Mineralogy	3
<u>GEOL 250</u>	The Solid Earth	3
<u>GEOL 332</u>	Optical Mineralogy	2
<u>GEOL 344</u>	Stratigraphy and Sedimentology	4
<u>GEOL 372</u>	Structural Geology	4
<u>GEOL 442</u>	Applied Geophysics	4
<u>GEOL 446</u>	Environmental Geology	3
<u>GEOL 454</u>	Geomorphology	4
<u>GEOL 530</u>	Advanced Petrology	3
<u>GEOL 570</u>	Plate Tectonics	3

Materials and Fluids Field

Code	Title	Credits
<u>CBE 331</u>	Momentum Transfer and Mechanical Separations	3
<u>CBE 332</u>	Heat and Mass Transfer Fundamentals	3
<u>CIVE 300</u>	Fluid Mechanics	3
<u>CIVE 301</u>	Fluid Mechanics Laboratory	1
<u>CIVE 363</u>	Material Properties	1
<u>CIVE 401</u>	Hydraulic Engineering	3
<u>CIVE 413</u>	Environmental River Mechanics	3
<u>MECH 331</u>	Introduction to Engineering Materials	4
<u>MECH 338</u>	Thermal/Fluid Sciences Laboratory	1
<u>MECH 342</u>	Mechanics and Thermodynamics of Flow Processes	3
<u>MECH 344</u>	Heat and Mass Transfer	3
<u>MECH 460</u>	Aeronautics	3
<u>PH 531</u>	Introductory Solid State Physics	3

Medical Physics Field

Code	Title	Credits
<u>BC 467</u>	Biochemistry of Disease	3
<u>BIOM 330</u>	Transport Phenomena in Biomedical Engineering	3
<u>BIOM 422</u>	Kinetics of Biomolecular and Cellular Systems	3
<u>BIOM 470</u>	Biomedical Engineering	3
<u>BMS 300</u>	Principles of Human Physiology	4
<u>BMS 325</u>	Cellular Neurobiology	3
<u>BMS 345</u>	Functional Neuroanatomy	4
<u>CHEM 433</u>	Clinical Chemistry	3
<u>ERHS 332</u>	Principles of Epidemiology	3
<u>ERHS 450</u>	Introduction to Radiation Biology	3
<u>ERHS 530</u>	Radiological Physics and Dosimetry I	3
<u>ERHS 531</u>	Nuclear Instruments and Measurements	2
<u>ERHS 556</u>	Monte Carlo Methods in Health Physics	3
<u>ERHS 561</u>	Radiation Public Health	2
<u>ERHS 563</u>	Environmental Contaminant Modeling I	2
<u>ERHS 570</u>	Radioecology	2
<u>MIP 300</u>	General Microbiology	3
<u>MIP 342</u>	Immunology	4
<u>MIP 351</u>	Medical Bacteriology	3
<u>MIP 420</u>	Medical and Molecular Virology	4

- ¹ For this concentration, 18 credits of technical electives must be selected from the departmental list. For students who change majors from Electrical Engineering or are double-majoring in Electrical Engineering, ECE 202 with a grade of C- or above is accepted as a substitute for PH 245; ECE 341 and ECE 342 with grades of C- or above are accepted as a substitute for PH 351.
- ² Select enough elective credits to bring the program total to a minimum of 120 credits, of which at least 42 must be upper division (300- to 400-level). CHEM 301 or CO 301B are recommended. Other courses in AUCC Category 2 may be accepted if they are taken prior to declaring the Physics major or are taken to meet requirements of another major.
- ³ A minimum of 6 credits must be 300-, 400-, or 500-level.
- ⁴ Select enough elective credits to bring the program total to a minimum of 120 credits, of which at least 42 must be upper-division (300-, 400-level, or 500-level).



**Intra-University
Grad Degree Program in Ecology – SAU
Master of Science in Ecology, Plan B**

Effective Fall 2016

Effective Fall 2016 2011

Code	Title	Credits
REQUIRED COURSES		
<u>ECOL 505</u>	Foundations of Ecology	<u>3</u> ²
<u>ECOL 571</u>	Advanced Topics in Ecology	<u>1</u> ²
<u>ECOL 592</u>	Interdisciplinary Seminar in Ecology	1
<u>ECOL 693</u>	Research Seminar	1
ECOLOGY FUNDAMENTALS		
Select a minimum of 3 additional credits from any courses listed in Groups A, B, or C ⁺		3
Electives, Independent Study, and Research ²		42
<u>Select 6 credits not taken elsewhere in the program from the following:</u>		<u>6</u>
Select one course from the following:		
Group A: Organism/Population ⁺		
<u>BZ 526/BSPM 526</u>	Evolutionary Ecology	
<u>BZ 525</u>	Molecular Ecology	
<u>BZ 526/BSPM 526</u>	Evolutionary Ecology	
<u>BZ 530</u>	Ecological Plant Morphology	
<u>BZ 535</u>	Behavioral Ecology	
<u>BZ 548</u>	Theory of Population and Evolutionary Ecology	
<u>BZ 555</u>	Reproductive Biology of Higher Plants	
<u>BZ 548</u>	Theory of Population and Evolutionary Ecology	
<u>BZ 578/MIP 578</u>	Genetics of Natural Populations	
<u>FW 544</u>	Ecotoxicology	
<u>FW 662</u>	Wildlife Population Dynamics	

Code	Title	Credits
Group B: Community/Ecosystem⁺		
<u>ATS 760</u>	Global Carbon Cycle	
<u>ECOL 600</u>	Community Ecology	
<u>ECOL 610</u>	Ecosystem Ecology	
<u>ECOL 600</u>	Community Ecology	
<u>ECOL 610</u>	Ecosystem Ecology	
<u>ECOL 620</u>	Applications in Landscape Ecology	
<u>ESS 660</u>	Biogeochemical Cycling in Ecosystems	
<u>F 624</u>	Fire Ecology	
<u>FW 555</u>	Conservation Biology	
<u>NR 578</u>	Ecology of Disturbed Lands	
<u>RS 565</u>	Riparian Ecology and Management	
<u>ESS 575</u>	Models for Ecological Data	
<u>ESS 660</u>	Biogeochemical Cycling in Ecosystems	
Select one course from the following not taken above to bring ecology courses total to a minimum of 6 credits:		
Group A: Organism/Population⁺		
<u>BSPM 570</u>	Chemical Ecology	
<u>FW 662</u>	Wildlife Population Dynamics	
Group B: Community/Ecosystem⁺		
<u>HORT 576</u>	Advanced Environmental Plant Stress Physiology	

ECOLOGY TOOLS

Select 3 credits not taken elsewhere in the program from the following:

3

Select one course from the following:

Group C: Quantitative/Qualitative Tools⁺

<u>AREC 535</u>	Applied Econometrics
<u>AREC 635</u>	Econometric Theory I
<u>AREC 735</u>	Econometric Theory II
<u>BZ 577/MIP 577</u>	Computer Analysis in Population Genetics
<u>CIVE 524/WR 524</u>	Modeling Watershed Hydrology
<u>ESS 565</u>	Niche Models
<u>ESS 575</u>	Models for Ecological Data
<u>FW 551</u>	Design of Fish and Wildlife Studies
<u>FW 552</u>	Applied Sampling for Wildlife/Fish Studies
<u>FW 663</u>	Sampling and Analysis of Vertebrate Populations
<u>FW 673/STAT 673</u>	Hierarchical Modeling in Ecology
<u>GR 503/NR 503</u>	Remote Sensing and Image Analysis

Code	Title	Credits
<u>MATH 530</u>	<u>Mathematics for Scientists and Engineers</u>	
<u>MATH 540</u>	<u>Dynamical Systems</u>	
<u>NR 505</u>	<u>Concepts in GIS</u>	
<u>NR 506</u>	<u>GIS Methods for Resource Management</u>	
<u>NR 512</u>	<u>Spatial Statistical Modeling-Natural Resources</u>	
<u>NR 523/STAT 523</u>	<u>Quantitative Spatial Analysis</u>	
<u>NR 554/ANTH 554</u>	<u>Ecological and Social Agent-based Modeling</u>	
<u>NRRT 665</u>	<u>Survey Research and Analysis</u>	
<u>NR 621</u>	<u>Design of Geographic Information Systems</u>	
<u>NRRT 765</u>	<u>Applied Multivariate Analysis</u>	
<u>POLS 621</u>	<u>Qualitative Methods in Political Science</u>	
<u>SOC 610</u>	<u>Seminar in Methods of Qualitative Analysis</u>	
<u>SOCR 522</u>	<u>Micrometeorology</u>	
<u>SOCR 620</u>	<u>Modeling Ecosystem Biogeochemistry</u>	
<u>SOCR 670</u>	<u>Terrestrial Ecosystems Isotope Ecology</u>	
<u>STAT 511</u>	<u>Design and Data Analysis for Researchers I</u>	
<u>STAT 512</u>	<u>Design and Data Analysis for Researchers II</u>	
<u>STAT 520</u>	<u>Introduction to Probability Theory</u>	
<u>STAT 521</u>	<u>Stochastic Processes I</u>	
<u>STAT 530</u>	<u>Mathematical Statistics</u>	
<u>STAT 540</u>	<u>Data Analysis and Regression</u>	
<u>STAT 544/ERHS 544</u>	<u>Biostatistical Methods for Quantitative Data</u>	
<u>STAT 560</u>	<u>Applied Multivariate Analysis</u>	
<u>STAT 675A</u>	<u>Topics in Statistical Methods: Sampling</u>	
<u>STAT 675B</u>	<u>Topics in Statistical Methods: Design</u>	
<u>STAT 675C</u>	<u>Topics in Statistical Methods: Multivariate and Regression Methods</u>	
<u>STAT 675D</u>	<u>Topics in Statistical Methods: Computer Intensive Methods</u>	
<u>STAT 675F</u>	<u>Topics in Statistical Methods: Robustness and Nonparametric Methods</u>	
<u>WR 674</u>	<u>Data Issues in Hydrology</u>	
<u>ADDITIONAL ELECTIVES, AND INDEPENDENT STUDY</u>		15
Program Total Credits		30

A minimum of 30 credits are required to complete this program.

- + Total credits from Groups A, B and C must equal at least 12 credits. Select courses with approval of advisor and committee. The distribution lists (Groups A, B, and C above) contain suggestions for appropriate courses and are not complete lists. For an updated list of appropriate program courses, go to <http://www.ecology.colostate.edu/>. Other courses that fit within these categories may be taken to satisfy the requirement with approval of advisor and committee.
- 2 Select from a combination of elective courses, ECOL 695, and ECOL 698 with approval of advisor and committee. Students in Plan B must complete a research paper or project.



Intra-University
School of Global Environmental Sustainability
Interdisciplinary Minor in Global Environmental Sustainability

Effective Fall 2016

Code	Title	Credits
------	-------	---------

Required Courses

<u>GES 101</u>	Foundations of Environmental Sustainability	3
<u>GES 470</u>	Applications of Environmental Sustainability	3

Selected Courses

Select one course from each Group A, B, and C. At least 3 credits of these courses must be upper-division (300- to 400-level). Courses may not fulfill two categories.

Group A: Society and Social Processes:

3

<u>AGRI 116/IE 116</u>	Plants and Civilizations (GT-SS3)
<u>AGRI 330/PHIL 330</u>	Agricultural and Food System Ethics
<u>ANTH 200</u>	Cultures and the Global System (GT-SS3)
<u>ANTH 330</u>	Human Ecology
<u>ANTH 415</u>	Indigenous Ecologies and the Modern World
<u>ANTH 453</u>	Impacts on Ancient Environments
<u>ETST 256</u>	Border Crossings: People/Politics/Culture (GT-SS3)
<u>GR 100</u>	Introduction to Geography (GT-SS2)
<u>GR 320</u>	Cultural Geography
<u>HIST 355</u>	American Environmental History
<u>HIST 470</u>	World Environmental History, 1500-Present
<u>HIST 471</u>	History of Antarctica, 1800-Present
<u>HORT 424/SOCR 424</u>	Topics in Organic Agriculture
<u>NR 320</u>	Natural Resources History and Policy
<u>NR 425</u>	Natural Resource Policy and Sustainability
<u>PHIL 320</u>	Ethics of Sustainability
<u>PHIL 345</u>	Environmental Ethics
<u>POLS 361</u>	U.S. Environmental Politics and Policy
<u>POLS 362</u>	Global Environmental Politics
<u>POLS 442</u>	Environmental Politics in Developing World
<u>PSY 316</u>	Environmental Psychology

Code	Title	Credits
<u>SOC 220</u>	Global Environmental Issues (GT-SS3)	
<u>SOC 320</u>	Population-Natural Resources and Environment	
<u>SOC 322</u>	<u>Introduction to Environmental Justice</u>	
<u>SOC 364</u>	Agriculture and Global Society	
<u>SOC 460</u>	Society and Environment	
<u>SOC 461</u>	Water, Society, and Environment	
<u>SOC 463</u>	Sociology of Disaster	
Group B: Biological and Physical Processes:		3
<u>ANTH 453</u>	Impacts on Ancient Environments	
<u>BSPM 308</u>	Ecology and Management of Weeds	
<u>BZ 348/MATH 348</u>	Theory of Population and Evolutionary Ecology	
<u>BZ 353/NR 353</u>	Global Change Ecology, Impacts and Mitigation	
<u>BZ 471</u>	Stream Biology and Ecology	
<u>ERHS 320</u>	Environmental Health - Water and Food Safety	
<u>ERHS 430</u>	Human Disease and the Environment	
<u>ERHS 448</u>	Environmental Contaminants: Exposure and Fate	
<u>ESS 210/GR 210</u>	Physical Geography	
<u>GEOL 122</u>	The Blue Planet: Geology of Our Environment (GT-SC2)	
<u>GR 100</u>	Introduction to Geography (GT-SS2)	
<u>GR 304/WR 304</u>	Sustainable Watersheds	
<u>GR 410</u>	Climate Change: Science, Policy, Implications	
<u>HORT 171/SOCR 171</u>	Environmental Issues in Agriculture (GT-SS3)	
<u>LAND 220/LIFE 220</u>	Fundamentals of Ecology (GT-SC2)	
<u>LAND 364</u>	Design and Nature	
<u>LAND 444</u>	Ecology of Landscapes	
<u>LIFE 320</u>	Ecology	
<u>NR 120A</u>	Environmental Conservation (GT-SC2)	
<u>NR 130</u>	Global Environmental Systems (GT-SC2)	
<u>RS 351</u>	Wildland Ecosystems in a Changing World	
<u>SOCR 341</u>	Microbiology for Sustainable Agriculture	
<u>SOCR 343</u>	Composting Principles and Practices	
<u>SOCR 440</u>	Pedology	
Group C: Economy and Profitability:		3
<u>AREC 202</u>	Agricultural and Resource Economics (GT-SS1)	
<u>AREC 240/ECON 240</u>	Issues in Environmental Economics (GT-SS1)	
<u>AREC 340/ECON 340</u>	Introduction: Economics of Natural Resources	
<u>AREC 346/ECON 346</u>	Economics of Outdoor Recreation	

Code	Title	Credits
<u>AREC 415</u>	International Agricultural Trade	
<u>AREC 442</u>	Water Resource Economics	
<u>AREC 460</u>	Ag- and Resource-Based Economic Development	
<u>MGT 360</u>	Social and Sustainable Venturing	
<u>F 322</u>	<u>Economics of the Forest Environment</u>	
<u>NR 425</u>	Natural Resource Policy and Sustainability	
Group D: Skills:		
Select at least one upper-division course (minimum of 3 credits) from category D not taken in another category:		3
<u>AREC 442</u>	Water Resource Economics	
<u>BZ 348/MATH 348</u>	Theory of Population and Evolutionary Ecology	
<u>BZ 348/MATH 348</u>	Theory of Population and Evolutionary Ecology	
<u>HORT 344</u>	Organic Greenhouse Production	
<u>HORT 345/SOCR 345</u>	Diagnosis and Treatment in Organic Fields	
<u>HORT 368/LAND 368</u>	Landscape Irrigation and Water Conservation	
<u>LAND 364</u>	Design and Nature	
<u>NR 320</u>	Natural Resources History and Policy	
<u>SOC 320</u>	Population-Natural Resources and Environment	
<u>SOC 463</u>	Sociology of Disaster	
<u>SOCR 440</u>	Pedology	
<u>SOCR 478</u>	Environmental Soil Sciences	
<u>Upper-Division Elective</u>		
Select 3 credits of upper-division <u>credits</u> elective(s) from categories A-D with a subject code not previously taken:		3
<u>Upper-Division Elective</u>		3
Program Total Credits		21



Request to Add a PhD in Communication

A request by the Department of Communication Studies to add a PhD in Communication was approved. The recommended effective date, subject to special action by Faculty Council and approval by the Board of Governors and CCHE, is Fall semester 2017.



Changes to Previous Minutes

November 13, 2015

New Courses

Effective Date

E 340 03(3-0-0). Literature and Film Studies. Every year, semester varies.

~~Fall 2016~~

Prerequisite: One literature course (E) or one AUCC 3B course.

Summer 2016

Restriction: No Freshman.

Registration Information:

Studies film adaptations of literary works with attention to narrative, style, theme, adaptation, and revision.

[CORRECTION: Effective term changed from Fall 2016 to Summer 2016 on 3/24/16.]

February 26, 2016

Major Changes to Courses

Effective Date

HES 319 ~~43~~ (3-20-0). Neuromuscular Aspects of Human Movement F, S, SS.

~~Fall 2016~~

Spring 2017

Prerequisite: ~~HES 207 and BMS 300. (BMS 300 or BMS 360) and (BMS 301).~~

Registration Information: Must register for lecture and laboratory.

Neuromuscular anatomy and physiology of human movement. Applied/integrated topics: aging, muscle fatigue, training, force control, and neuromuscular disease.

[CORRECTION: Effective term changed from Fall 2016 to Spring 2017 on 3/30/16.]

March 4, 2016

Major Changes to Courses

Effective Date

HES 307 ~~43~~(3-20-0) Biomechanical Principles of Human Movement F, S, SS.

~~Fall 2016~~

Spring 2017

Prerequisite: (HES 207 or BMS 301) and (PH 121 or PH 141).

Registration Information: Must register for lecture and laboratory.

~~Identify with and utilize biomechanical principles pertinent to human movement. Study and elementary analysis of human motion based on anatomical and mechanical principles.~~

[CORRECTION: Effective term changed from Fall 2016 to Spring 2017 on 3/30/16.]

The meeting adjourned at 4:35 p.m.

(FC) 4/1/16

Carole Makela, Chair
 Shelly Ellerby, Curriculum Liaison Specialist

A regular meeting of the University Curriculum Committee was held on April 1, 2016, at 2:00 p.m.

Members present: Chair Carole Makela, Professors Ed DeLosh, Bradley Goetz, Mike Hogan, Paul Mallette, Beth Oehlerts, Brad Reisfeld, Howard Ramsdell, Sally Sutton, David Gilkey (IVPUA, ex-officio), Graduate Representative Kevin Jablonski, Undergraduate representative Tyler Siri.

Curriculum Liaison Specialist: Shelly Ellerby.

Guests: Julia Murphy (Registrar's Office), Don Samuelson (CoSRGE Chair), Linda Selkirk (CSU Online).

Absent:

Minutes

The Minutes of March 25, 2016 were approved.

Consent Agenda

The Consent Agenda was approved.

New Courses

Effective Term

JTC 357 3(3-0-0). Persuasion in Advertising As needed.

Spring 2017

Prerequisite: JTC 355.

Registration Information: Sections may be offered: Online.

Theoretical issues in the study of persuasion and its application in creating advertising campaigns.

JTC 422 3(3-0-0). Entrepreneurial Journalism As needed.

Spring 2017

Prerequisite: JTC 326.

Registration Information: Junior standing. Sections may be offered: Online.

The concepts and practices of developing media content solutions for the digital age.

Major Change to Courses

Effective Term

ECOL 505 ~~32~~(2-0-10). Foundations of Ecology F.

Fall 2016

Prerequisite: LAND 220 or LIFE 220 or LIFE 320 or NR 220.

Registration Information: None.

Overview of the science of ecology; what questions are asked, how they are answered.

[credit hour change was approved previously on 3/25/16 minutes; course learning objectives were approved on 4/1/16 minutes]

NR 400 3(2-0-1). Public Relations in Natural Resources F, S, SS.

Spring 2017

Prerequisite: NR 320.

Registration Information: Must register for lecture and recitation. Junior status. Sections may be offered: Online.

Effective public relations and public information programs applicable to natural resource professions.



Major Change to Existing Programs

College of Engineering Effective Fall 2016
 Dual Degree Program: Biomedical Engineering and Electrical Engineering, Electrical Engineering Concentration

Effective Fall 2016 ~~Spring 2012~~

View Major Completion Map

FRESHMAN

		AUCC	CREDITS
<u>BIOM 101</u>	Introduction to Biomedical Engineering		3
<u>CHEM 111</u>	General Chemistry I (GT-SC2)	3A	4
<u>CHEM 112</u>	General Chemistry Lab I (GT-SC1)	3A	1
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
Select one group from the following:			3-4
Group A:			
<u>CS 155</u>	Introduction to Unix		
<u>CS 156</u>	Introduction to C Programming I		
<u>CS 157</u>	Introduction to C Programming II		
Group B:			
<u>CS 160</u>	Foundations in Programming		
<u>ECE 102</u>	Digital Circuit Logic		4
<u>ECE 103</u>	DC Circuit Analysis		3
<u>MATH 160</u>	Calculus for Physical Scientists I (GT-MA1)	1B	4
<u>MATH 161</u>	Calculus for Physical Scientists II (GT-MA1)	1B	4
<u>PH 141</u>	Physics for Scientists and Engineers I (GT-SC1)	3A	5
Additional Requirements for Graduation ¹			0
Total Credits			34-35

SOPHOMORE

<u>CHEM 113</u>	General Chemistry II		3
<u>ECE 202</u>	Circuit Theory Applications		4
<u>ECE 251</u>	Introduction to Microprocessors		4
<u>LIFE 102</u>	Attributes of Living Systems (GT-SC1)	3A	4
<u>MATH 261</u>	Calculus for Physical Scientists III		4
Select one course from the following:			4
<u>MATH 340</u>	Introduction to Ordinary Differential Equations		
<u>MATH 345</u>	Differential Equations		
<u>MECH 337</u>	Thermodynamics		4
<u>PH 142</u>	Physics for Scientists and Engineers II (GT-SC1)	3A	5
Additional Requirements for Graduation ¹			0

Total Credits 32

JUNIOR

<u>BMS 300</u>	Principles of Human Physiology		4
<u>CHEM 245</u>	Fundamentals of Organic Chemistry		4
<u>ECE 303/STAT 303</u>	Introduction to Communications Principles		3
<u>ECE 311</u>	Linear System Analysis I		3
<u>ECE 312</u>	Linear System Analysis II		3
<u>ECE 341</u>	Electromagnetic Fields and Devices I		3
<u>ECE 342</u>	Electromagnetic Fields and Devices II		3
<u>LIFE 210</u>	Introductory Eukaryotic Cell Biology		3
<u>MECH 262</u>	Engineering Mechanics		4
<u>Global and Cultural Awareness</u>		3E	3
Additional Requirements for Graduation ¹			0
Total Credits			33

SENIOR

<u>BIOM 300</u>	Problem-Based Learning Biomedical Engr Lab		4
<u>ECE 331</u>	Electronics Principles I		4
<u>ECE 332</u>	Electronics Principles II		4
<u>ECE 404</u>	Experiments in Optical Electronics	-	2
<u>ECE 441</u>	Optical Electronics	-	3
<u>ECON 202</u>	Principles of Microeconomics (GT-SS1)	3C	3
<u>Arts and Humanities</u>		3B	3
<u>Technical Electives³</u>		-	6
<u>ECE Technical Electives²</u>		-	9
Additional Requirements for Graduation ¹			0
Total Credits			27

FIFTH YEAR

<u>BIOM 486A</u>	Biomedical Design Practicum: Capstone Design I	4A,4B,4C	4
<u>BIOM 486B</u>	Biomedical Design Practicum: Capstone Design II	4A,4B,4C	4
Select one from the following:			3
<u>CO 301B</u>	Writing in the Disciplines: Sciences (GT-CO3)	2	
<u>JTC 300</u>	Professional and Technical Communication (GT-CO3)	2	
<u>Arts and Humanities</u>		3B	3
<u>Historical Perspectives</u>		3D	3
<u>Technical Electives³</u>		-	12
<u>BME Technical Electives (See list below)</u>			6

<u>ECE Technical Electives²</u>	<u>8</u>
<u>Additional Requirements for Graduation¹</u>	<u>0</u>

Total Credits 31

Program Total Credits: 157-158

BME Technical Electives:

Code	Title	Credits
<u>BC 351</u>	<u>Principles of Biochemistry</u>	<u>4</u>
<u>BC 401</u>	<u>Comprehensive Biochemistry I</u>	<u>3</u>
<u>BC 403</u>	<u>Comprehensive Biochemistry II</u>	<u>3</u>
<u>BC 404</u>	<u>Comprehensive Biochemistry Laboratory</u>	<u>2</u>
<u>BC 411</u>	<u>Physical Biochemistry</u>	<u>4</u>
<u>BC 463</u>	<u>Molecular Genetics</u>	<u>3</u>
<u>BC 465</u>	<u>Molecular Regulation of Cell Function</u>	<u>3</u>
<u>BC 565</u>	<u>Molecular Regulation of Cell Function</u>	<u>4</u>
<u>BIOM 330</u>	<u>Transport Phenomena in Biomedical Engineering</u>	<u>3</u>
<u>BIOM 422</u>	<u>Kinetics of Biomolecular and Cellular Systems</u>	<u>3</u>
<u>BIOM 441</u>	<u>Biomechanics and Biomaterials</u>	<u>3</u>
<u>BIOM 470/MECH 470</u>	<u>Biomedical Engineering</u>	<u>3</u>
<u>BIOM 476A</u>	<u>Biomedical Clinical Practicum I</u>	<u>2</u>
<u>BIOM 476B</u>	<u>Biomedical Clinical Practicum II</u>	<u>4</u>
<u>BIOM 495</u>	<u>Independent Study</u>	<u>1-6</u>
<u>BIOM 504/CBE 504</u>	<u>Fundamentals of Biochemical Engineering</u>	<u>3</u>
<u>BIOM 525/MECH 525</u>	<u>Cell and Tissue Engineering</u>	<u>3</u>
<u>BIOM 526/ECE 526</u>	<u>Biological Physics</u>	<u>3</u>
<u>BIOM 531/MECH 531</u>	<u>Materials Engineering</u>	<u>3</u>
<u>BIOM 533/CIVE 533</u>	<u>Biomolecular Tools for Engineers</u>	<u>3</u>
<u>BIOM 543</u>	<u>Membranes for Biotechnology and Biomedicine</u>	<u>3</u>
<u>BIOM 570/MECH 570</u>	<u>Bioengineering</u>	<u>3</u>
<u>BIOM 573/MECH 573</u>	<u>Structure and Function of Biomaterials</u>	<u>3</u>
<u>BMS 301</u>	<u>Human Gross Anatomy</u>	<u>5</u>
<u>BMS 302</u>	<u>Laboratory in Principles of Physiology</u>	<u>2</u>
<u>BMS 325</u>	<u>Cellular Neurobiology</u>	<u>3</u>
<u>BMS 345</u>	<u>Functional Neuroanatomy</u>	<u>4</u>
<u>BMS 405</u>	<u>Nerve and Muscle-Toxins, Trauma and Disease</u>	<u>3</u>
<u>BMS 420</u>	<u>Cardiopulmonary Physiology</u>	<u>3</u>
<u>BMS 430</u>	<u>Endocrinology</u>	<u>3</u>
<u>BMS 450</u>	<u>Pharmacology</u>	<u>3</u>

Code	Title	Credits
<u>BMS 500</u>	<u>Mammalian Physiology I</u>	<u>4</u>
<u>BMS 501</u>	<u>Mammalian Physiology II</u>	<u>4</u>
<u>BZ 311</u>	<u>Developmental Biology</u>	<u>4</u>
<u>BZ 350</u>	<u>Molecular and General Genetics</u>	<u>4</u>
<u>BZ 476/BZ 576</u>	<u>Genetics of Model Organisms</u>	<u>3</u>
<u>CBE 330</u>	<u>Process Simulation</u>	<u>3</u>
<u>CHEM 334</u>	<u>Quantitative Analysis Laboratory</u>	<u>1</u>
<u>CHEM 335</u>	<u>Introduction to Analytical Chemistry</u>	<u>3</u>
<u>CHEM 343</u>	<u>Modern Organic Chemistry II</u>	<u>3</u>
<u>CHEM 433</u>	<u>Clinical Chemistry</u>	<u>3</u>
<u>CHEM 344</u>	<u>Modern Organic Chemistry Laboratory</u>	<u>2</u>
<u>CHEM 346</u>	<u>Organic Chemistry II</u>	<u>4</u>
<u>CHEM 539A</u>	<u>Principles of NMR and MRI: Basic NMR Principles</u>	<u>1</u>
<u>CHEM 539B</u>	<u>Principles of NMR and MRI: NMR Diffusion Measurements-2D NMR and MRI</u>	<u>1</u>
<u>CHEM 539C</u>	<u>Principles of NMR and MRI: Advanced NMR and MRI Techniques</u>	<u>1</u>
<u>CM 501</u>	<u>Advanced Cell Biology</u>	<u>4</u>
<u>CM 502/NB 502</u>	<u>Techniques in Molecular & Cellular Biology</u>	<u>2</u>
<u>ECE 569/MECH 569</u>	<u>Micro-Electro-Mechanical Devices</u>	<u>3</u>
<u>ERHS 502</u>	<u>Fundamentals of Toxicology</u>	<u>3</u>
<u>ERHS 510</u>	<u>Cancer Biology</u>	<u>3</u>
<u>HES 307</u>	<u>Biomechanical Principles of Human Movement</u>	<u>3</u>
<u>HES 319</u>	<u>Neuromuscular Aspects of Human Movement</u>	<u>3</u>
<u>HES 403</u>	<u>Physiology of Exercise</u>	<u>4</u>
<u>HES 405</u>	<u>Exercise Testing Instrumentation</u>	<u>2</u>
<u>HES 476</u>	<u>Exercise and Chronic Disease</u>	<u>3</u>
<u>MATH 455</u>	<u>Mathematics in Biology and Medicine</u>	<u>3</u>
<u>MECH 543</u>	<u>Biofluid Mechanics</u>	<u>3</u>
<u>MIP 300</u>	<u>General Microbiology</u>	<u>3</u>
<u>MIP 302</u>	<u>General Microbiology Laboratory</u>	<u>2</u>
<u>MIP 342</u>	<u>Immunology</u>	<u>4</u>
<u>MIP 343</u>	<u>Immunology Laboratory</u>	<u>2</u>
<u>MIP 351</u>	<u>Medical Bacteriology</u>	<u>3</u>
<u>MIP 352</u>	<u>Medical Bacteriology Laboratory</u>	<u>3</u>
<u>MIP 420</u>	<u>Medical and Molecular Virology</u>	<u>4</u>
<u>MIP 436</u>	<u>Industrial Microbiology</u>	<u>4</u>
<u>MIP 443</u>	<u>Microbial Physiology</u>	<u>4</u>

48

Code	Title	Credits
<u>MIP 450</u>	<u>Microbial Genetics</u>	<u>3</u>
<u>MIP 576/BSPM 576</u>	<u>Bioinformatics</u>	<u>3</u>
<u>NB 500</u>	<u>Readings in Cellular Neurobiology</u>	<u>1</u>
<u>NB 501</u>	<u>Cellular and Molecular Neurophysiology</u>	<u>2</u>
<u>NB 503/BMS 503</u>	<u>Developmental Neurobiology</u>	<u>3</u>
<u>NB 505/BMS 505</u>	<u>Neuronal Circuits, Systems and Behavior</u>	<u>3</u>

- ¹ Students are required to participate in the Professional Learning Institute (PLI) program as a requirement for graduation. The program consists of eleven PLI workshops distributed by focus areas as follows: Global and Cultural Diversity (2 workshops), Innovation (2 workshops), Leadership (2 workshops), Civic and Public Engagement (2 workshops), and Ethics (3 workshops). Each workshop is between 1-2 hours long and no outside preparation is required to attend any of the workshops. Attendance at the required workshops may be spread over the student's five-year program.
- ² Select a total of 17 credits from ECE 400-level or higher courses not otherwise required. 3 of the 17 credits must be from ECE courses dual-listed with the BIOM subject code. Select a total of 15 credits from courses with the BIOM or ECE subject code.



Changes to Previous Minutes

December 4, 2015

Major Change to Courses

JTC 210 3(1-4-0 for Face-to-Face) and 3(3-0-0 for Online) Newswriting. F, S, SS.

Spring 2016

Prerequisite: None.

Registration Information: Credit not allowed for both JTC 210 and JTC 192. Must register for lecture and laboratory for face-to-face offerings. Sections may be offered: Online.

Grade Mode: S/U within Student Option, Trad within Student Option: Traditional.

Theory and practice in newswriting.

[UPDATE: Contact hour distribution for both online and face-to-face formats now listed, as well as the grade mode change that was approved 12/4/15]

February 26, 2016

Major Change to Courses

~~HES 456 455 3 (3-0-0). Advanced Wellness Health Promotion Programming F, S.~~

~~Fall 2016~~

~~Spring 2017~~

Prerequisite: HES 355 and HES 386A and HES 403. HES 356 may be taken concurrently and HES 403.

Registration Information: Senior standing. Credit not allowed in both HES 455 and HES 456.

Investigation of established health promotion ~~wellness~~ programs with special emphasis on design, implementation, and evaluation of programming models.

[Approved this course for AUCC 4A and 4C for the following program:
Major in Health and Exercise Science, Health Promotion Concentration]

[CHANGE: Effective term changed from Fall 2016 to Spring 2017]

SOWK 560 3 (02-0-34). Social Work Practice in Schools S, SS.

Summer 2016

Prerequisite: None.

Registration Information: This is a partial-semester course. Completed master's degree in social work or enrollment in a master's in social work program. Online only course. Must register for lecture and recitation. Enrollment in MSW program or MSW can be substituted for enrollment in MSW program. Sections may be offered: Online.

Knowledge and skills essential to the practice of social work in educational settings. Topics explored: historical, legal, structural, and cultural context of social work in schools, the impact of disability on an individual and a family, and current issues challenging the practitioner in school settings.

[CORRECTION: Contact hour distribution corrected]



The meeting adjourned at 3:20 p.m.

(FC) 4/8/16

Carole Makela, Chair
 Shelly Ellerby, Curriculum Liaison Specialist



University Curriculum Committee
 April 1, 2016
CONSENT AGENDA

Course Drops

	Course Title	Requested Change	Effective Term
<u>ART 101</u>	Visual Form	Drop	Spring 2017
<u>ART 106D</u>	Art Studio	Drop	Spring 2017
<u>ART 113</u>	Native Art Survey	Drop	Spring 2017
<u>ART 375</u>	Figure Modeling and Drawing	Drop	Spring 2017

Experimental Courses

	Course Title	1st/2nd Offering; Request date	Effective Term
<u>ANTH 581A3</u>	Resilience, Well-Being, and Social Justice	1 st Offering Request date: 2/29/16	Fall 2016
<u>ETST 581A2</u>	Race and the City	1 st Offering Request date: 3/22/16	Fall 2016
<u>PHIL 380A1</u>	Philosophy Goes to the Movies	1 st Offering Request date: 3/11/16	Fall 2016
<u>PSY 280A1</u>	Human Factors and Engineering Psychology	1 st Offering Request date: 1/4/16	Summer 2016

A regular meeting of the University Curriculum Committee was held on April 8, 2016, at 2:00 p.m.

Members present: Chair Carole Makela, Professors Ed DeLosh, Bradley Goetz, Mike Hogan, Paul Mallette, Beth Oehlerts, Brad Reisfeld, Sally Sutton, David Gilkey (IVPUA, ex-officio), Graduate Representative Kevin Jablonski, Undergraduate representative Tyler Siri.

Curriculum Liaison Specialist: Shelly Ellerby.

Guests: James Lindsay (Professor-History), Katie Risheill (Registrar's Office), Linda Selkirk (CSU Online).

Absent: Howard Ramsdell.

Minutes

The Minutes of April 1, 2016 were approved.

Consent Agenda

The Consent Agenda was approved.

New Courses

Effective Term

LB 386F Var[1-3]. Practicum–Sports Production F, S, SS.

Spring 2017

Prerequisite: None.

Registration Information:

Practicum in producing for various sporting events.

Major Change to Courses

Effective Term

ATS 606 ~~23~~(23-0-0) Introduction to Climate F S.

Spring 2017

Prerequisite: MATH 261 and MATH 530.

Registration Information: Graduate or Professional standing.

Global energy balance, surface energy balance, the hydrological cycle, atmosphere general circulation, ocean general circulation, climate variability, climate sensitivity and feedbacks.

Exchange of energy, water, and momentum through the atmosphere, surface, vegetation, oceans. Paleoclimate, climate change, variability, and feedbacks.

ATS 622 ~~23~~ (23-0-0) Atmospheric Radiation S.

Spring 2017

Prerequisite: ATS 620.

Registration Information: Graduate or Professional standing.

Role of radiation in the energy balance of the climate system; Absorption and scattering of solar radiation; Emission and absorption of terrestrial radiation; Interactions of radiation with clouds and aerosols; Role of radiative active trace gases. Terrestrial, solar radiation propagation in the atmosphere; radiative components in energy budgets, weather systems, climate studies; remote sensing.

ATS 641 ~~23~~(12-23-0) Mesoscale Meteorology S.

Spring 2017

Prerequisite: ATS 640.

Registration Information: Graduate or Professional standing. Must register for lecture and laboratory.

Mesoscale weather systems; mesoanalysis techniques; upper and low level jets; instabilities; orographic flows; dynamics of convective storms; organized convection.



New Graduate Certificates

Intra-University
 School of Global Environmental Sustainability
 Graduate Certificate in Applied Global Stability: Agriculture

Effective Spring 2017

Additional coursework may be required due to prerequisites.

Code	Title	Credits
Required:		3
<u>GES 520</u>	Issues in Global Environmental Sustainability ¹	
Select 9 credits from the following:		9
<u>AGRI 500</u>	Advanced Issues in Agriculture	
<u>AGRI 510</u>	Sustainable Agriculture	
<u>AGRI 515/HORT 515</u>	Urban Horticulture	
<u>AGRI 550</u>	Capacity Building for a Changing Workplace	
<u>AGRI 570</u>	Issues in Animal Agriculture	
<u>AGRI 601</u>	Bioenergy Technology	
<u>AGRI 602</u>	Bioenergy Policy, Economics, and Assessment	
<u>AGRI 632</u>	Managing for Ecosystem Sustainability	
<u>AGRI 634</u>	Animal Production Systems	
<u>FSHN 500</u>	Food Systems, Nutrition, and Food Security	
<u>SOC 562</u>	Sociology of Food Systems and Agriculture	
Program Total Credits		12

¹ Or a SoGES endorsed graduate course chosen in consultation with certificate adviser if GES 520 has been completed.

*This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.



Intra-University
 School of Global Environmental Sustainability
 Graduate Certificate in Applied Global Stability: Natural Resources

Effective Spring 2017

Additional coursework may be required due to prerequisites.

Code	Title	Credits
Required:		3
<u>GES 520</u>	Issues in Global Environmental Sustainability ¹	
Select 9 credits from the following:		9
<u>AREC 540/ECON 540</u>	Environmental and Natural Resource Economics	
<u>NR 515</u>	Natural Resources Policy and Biodiversity	
<u>NR 535</u>	Action for Sustainable Behavior	
<u>NR 550</u>	Sustainable Military Lands Management	
<u>NR 551</u>	Cultural Resource Management on Military Lands	

Code	Title	Credits
<u>NR 552</u>	Ecology of Military Lands	
<u>NR 553</u>	DoD Sustainable Building and Infrastructure	
<u>NR 566</u>	Natural Resource Inventory and Data Analysis	
<u>NR 567</u>	Analysis of Environmental Impact	
<u>NR 568</u>	Economics of Forests, Restoration and Fire	
Program Total Credits		12

¹ Or a SoGES endorsed graduate course chosen in consultation with certificate advisor if GES 520 has been completed.

*This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.



Intra-University
School of Global Environmental Sustainability
Graduate Certificate in Applied Global Stability: Water Resources

Effective Spring 2017

Additional coursework may be required due to prerequisites.

Code	Title	Credits
Required:		3
<u>GES 520</u>	Issues in Global Environmental Sustainability ¹	
Select 9 credits from the following:		9
<u>AREC 542</u>	Applied Advanced Water Resource Economics	
<u>CIVE 512</u>	Irrigation Systems Design	
<u>CIVE 516</u>	Water Control and Measurement	
<u>CIVE 519</u>	Irrigation Water Management	
<u>CIVE 520</u>	Physical Hydrology	
<u>CIVE 522</u>	Engineering Hydrology	
<u>CIVE 525</u>	Water Engineering: International Development	
<u>CIVE 532</u>	Wells and Pumps	
<u>CIVE 539</u>	Water and Wastewater Analysis	
<u>CIVE 540</u>	Advanced Biological Wastewater Processing	
<u>CIVE 544</u>	Water Resources Planning and Management	
<u>CIVE 549</u>	Drainage and Wetland Engineering	
<u>CIVE 553</u>	Slope Stability and Retaining Structures	
<u>CIVE 571</u>	Pipeline Engineering and Hydraulics	
<u>CIVE 575</u>	Sustainable Water and Waste Management	
<u>CIVE 578</u>	Infrastructure and Utility Management	
<u>WR 511</u>	Water Resource Development	
Program Total Credits		12

¹ Or a SoGES endorsed graduate course chosen in consultation with certificate advisor if GES 520 has been completed.

This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.



Major Change to Existing Programs

College of Natural Sciences
 Department of Biochemistry & Molecular Biology
 Major in Biochemistry, Pre-Pharmacy Concentration

Effective Fall 2016

Effective Fall 2016

View Major Completion Map

A minimum grade of C (2.000) must be earned for BC 493 and all biochemistry (BC) and LIFE subject code lecture and laboratory courses at or above the 200-level required in the biochemistry major.

FRESHMAN

		AUCC	CREDITS
<u>BC 192</u>	Biochemistry Freshman Seminar		2
<u>CHEM 111</u>	General Chemistry I (GT-SC2)	3A	4
<u>CHEM 112</u>	General Chemistry Lab I (GT-SC1)	3A	1
<u>CHEM 113</u>	General Chemistry II		3
<u>CHEM 114</u>	General Chemistry Lab II		1
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>LIFE 102</u>	Attributes of Living Systems (GT-SC1)	3A	4
<u>LIFE 201B</u>	Introductory Genetics: Molecular/Immunological/Developmental (GT-SC2)	3A	3
<u>LIFE 203</u>	Introductory Genetics Laboratory		2
Select one group from the following:			8
Group A:			
<u>MATH 155</u>	Calculus for Biological Scientists I (GT-MA1)	1B	
<u>MATH 255</u>	Calculus for Biological Scientists II (GT-MA1)	1B	
Group B:			
<u>MATH 160</u>	Calculus for Physical Scientists I (GT-MA1)	1B	
<u>MATH 161</u>	Calculus for Physical Scientists II (GT-MA1)	1B	
Total Credits			31

SOPHOMORE

<u>BMS 300 or 360</u>	Principles of Human Physiology Fundamentals of Physiology	-	4
<u>BMS 302</u>	Laboratory in Principles of Physiology	-	2
<u>CHEM 341</u>	Modern Organic Chemistry I		3

54

University Curriculum Committee

April 8, 2016

Page 5

<u>CHEM 343</u>	Modern Organic Chemistry II		3
<u>CHEM 344</u>	Modern Organic Chemistry Laboratory		2
<u>ECON 202</u>	Principles of Microeconomics (GT-SS1)	3C	3
<u>LIFE 210</u>	Introductory Eukaryotic Cell Biology		3
<u>LIFE 212</u>	Introductory Cell Biology Laboratory		2
Select one <u>course</u> from the following:			5
<u>PH 121</u>	General Physics I (GT-SC1)	3A	
<u>PH 141</u>	Physics for Scientists and Engineers I (GT-SC1)	3A	
<u>SPCM 200</u>	Public Speaking		3
<u>Advanced Writing</u>		2	3
<u>AUCC Category 3 courses¹</u>		3B, 3D, 3E	3
Total Credits			30

JUNIOR

<u>BC 401</u>	Comprehensive Biochemistry I	4A	3
<u>BC 403</u>	Comprehensive Biochemistry II	4B	3
<u>BC 404</u>	Comprehensive Biochemistry Laboratory	4B	2
<u>ECON 202</u>	Principles of Microeconomics (GT-SS1)	3C	3
<u>BMS 300</u>	Principles of Human Physiology	-	4
<u>BMS 302</u>	Laboratory in Principles of Physiology	-	2
<u>MIP 300</u>	General Microbiology		3
<u>MIP 302</u>	General Microbiology Laboratory		2
Select one <u>course</u> from the following:			5
<u>PH 122</u>	General Physics II (GT-SC1)	3A	
<u>PH 142</u>	Physics for Scientists and Engineers II (GT-SC1)	3A	
<u>STAT 301 or 307</u>	Introduction to Statistical Methods Introduction to Biostatistics	-	3
<u>AUCC Category 3 courses¹</u>		3B, 3D, 3E	6
Total Credits			30

SENIOR

<u>BC 411</u>	Physical Biochemistry		4
Select one <u>course</u> from the following:			3
<u>BC 463</u>	Molecular Genetics		
<u>BC 465</u>	Molecular Regulation of Cell Function		
<u>BC 493</u>	Senior Seminar	4A,4C	1
Select one <u>course</u> from the following:			3
<u>BC 499A</u>	Thesis: Laboratory Research-Based	4C	
<u>BC 499D</u>	Thesis: Literature-based in Pre-Pharmacy	4C	

<u>MIP 342</u>	Immunology	-	4
<u>AUCC Category 3 courses¹</u>		3B, 3D, 3E	<u>36</u>
<u>BMS 301</u>	<u>Human Gross Anatomy</u>	-	<u>5</u>
<u>STAT 301</u>	<u>Introduction to Statistical Methods</u>	-	<u>3</u>
Elective ²			<u>75</u>
Total Credits			29
Program Total Credits:			120

- ¹ Select from the list of courses in categories ~~3B-3E~~ 3B, D, E (six credits [two courses] must come from 3B; one course each from categories ~~3C, 3D and 3E~~ in the AUCC. Only 3 of the 6 credits required for Arts and Humanities may come from intermediate (L*** 200 and L*** 201) foreign language courses. Students should plan on taking ECON 202 as the AUCC Cat 3C requirement.
- ² Select enough elective credits to bring the program total to a minimum of 120 credits, of which at least 42 must be upper-division (300- to 400-level).



The meeting adjourned at 3:30 p.m.

(FC) 4/15/16

Carole Makela, Chair
 Shelly Ellerby, Curriculum Liaison Specialist

University Curriculum Committee
 April 8, 2016
CONSENT AGENDA

Minor Changes to Courses

	Course Title	Requested Change	Effective Term
<u>ECE 451</u>	Digital System Design	Prerequisites: ECE 102 with a minimum grade of C-; and ECE 202 with a minimum grade of C-.	Spring 2017
Reason for Request:	The course pre-requisites are approved as a C-. Requesting to change the pre-requisite grade to a C.		
<u>ECE 666</u>	Topics in Robotics	Offering Year: Every Odd Prerequisite: ECE 555 or MECH 514 or MECH 564, ECE 455	Spring 2017
Reason for Request:	Update the term of offering. Course has been regularly scheduled for the odd spring semesters. This allows for offering ECE455 every fall term, ECE555 in the even spring terms and ECE666 in the odd spring terms.		

56

A regular meeting of the University Curriculum Committee was held on April 15, 2016, at 2:00 p.m.

Members present: Chair Carole Makela, Professors Ed DeLosh, Bradley Goetz, Mike Hogan, Paul Mallette, Beth Oehlerts, Howard Ramsdell, Brad Reisfeld, Sally Sutton, Graduate Representative Kevin Jablonski, Undergraduate representative Tyler Siri.

Curriculum Liaison Specialist: Shelly Ellerby.

Guests: Linda Selkirk (CSU Online), D. Tobiassen Baitinger (Registrar's Office).

Absent: David Gilkey (IVPUA, ex-officio).

Minutes

The Minutes of April 8, 2016 were approved.

Consent Agenda

The Consent Agenda was approved.

New Graduate Certificates

College of Health and Human Sciences
School of Social Work
Graduate Certificate in Military and Veteran Culture

Effective Spring 2017

Additional coursework may be required due to prerequisites.

Code	Title	Credits
Required Courses:		
<u>SOWK 640</u>	Contemporary Issues in Military Culture	3
<u>SOWK 641</u>	Military Family Systems	3
<u>SOWK 642</u>	Clinical Intervention with Military Personnel	3
Program Total Credits		9

*This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.



College of Liberal Arts
Department of Foreign Languages & Literature
Graduate Certificate in French Linguistics and Literary Studies

Effective Spring 2017

Additional coursework may be required due to prerequisites.

Code	Title	Credits
FRENCH		
Select 12 credits from the following:		12
<u>LFRE 500</u>	Language Analysis/Stylistics-French	
<u>LFRE 536</u>	Topics in French Linguistics	
<u>LFRE 551</u>	Selected French Literary Movements/Periods	
<u>LFRE 552</u>	Advanced Studies in French Literary Genres	
<u>LFRE 553</u>	Advanced French Author Studies	

57

Code	Title	Credits
<u>LFRE 554</u>	Advanced Topic Studies-French	

Program Total Credits 12

*This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.



College of Liberal Arts
 Department of Foreign Languages & Literature
 Graduate Certificate in Spanish Linguistics and Literary Studies

Effective Spring 2017

Additional coursework may be required due to prerequisites.

Code	Title	Credits
SPANISH		

Select 12 credits from the following: 12

<u>LSPA 500</u>	Language Analysis/Stylistics-Spanish
<u>LSPA 536</u>	Topics in Spanish Linguistics
<u>LSPA 549</u>	Literary Periods of Spanish America
<u>LSPA 551</u>	Selected Spanish Literary Movements/Periods
<u>LSPA 552</u>	Advanced Studies in Spanish Literary Genres
<u>LSPA 553</u>	Advanced Spanish Author Studies
<u>LSPA 554</u>	Advanced Topic Studies-Spanish

Program Total Credits 12

*This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.



New Courses

Effective Term

BIOM 431 Biomedical Signal and Image Processing 3(3-0-0) S

Spring 2017

Also Offered As: ECE 431

Prerequisite: PH 142 with a minimum grade of C; ECE 311 with a minimum grade of C; ECE 303 with a minimum grade of C.

Registration Information: Credit not allowed for both BIOM 431 and ECE 431.

Description: Principles, features and mathematical processing of biomedical signals and images including interference and noise filtering and feature enhancement.

Grade Mode: Traditional.

ECE 431 Biomedical Signal and Image Processing 3(3-0-0) S

Spring 2017

Also Offered As: BIOM 431

Prerequisite: PH 142 with a minimum grade of C; ECE 311 with a minimum grade of C; ECE 303 with a minimum grade of C.

Registration Information: Credit not allowed for both BIOM 431 and ECE 431.

Description: Principles, features and mathematical processing of biomedical signals and images including interference and noise filtering and feature enhancement.

Grade Mode: Traditional.

SF

Major Change to Courses

Effective Term

ECE 555 Advanced Robotics: Redundancy & Optimization ~~Robot Motion Planning~~
3(3-0-0) F S.

Spring 2017

Prerequisite: ECE 455; CS-253 and MATH 369.

Registration Information:

Description: Advanced analysis, design, and control of kinematically redundant articulated objects, including both robotic and biological systems. Concepts in geometry and spatial reasoning for the design of autonomous robots.

Grade Mode: Traditional.

Offering Year: ~~Every~~ Even

HDFS 470 Campus Connections- Corps: Mentoring At-Risk Youth 3(0-4-2) F, S, SS.

Spring 2017

Prerequisite: None.

Registration Information: Completion of AUCC 3C Social and Behavioral Sciences; Human Development and Family Studies majors only. Written consent of instructor. Required background check through CBI, FBI. Course may be taken for a maximum of 9 credits.

Description: Service-learning course engaging students as mentors with local at-risk youth.

Grade Mode: Traditional.

HDFS 497F Group Study: Honors Human Development Var [1-3] F, S.

Spring 2017

Prerequisite: None.

Registration Information: Written consent of department required. A maximum of 3 credits may count toward a student's concentration. Course may be repeated up to nine times for elective credit.

Description: Application of human development skills in a variety of settings.

Grade Mode: ~~S/U Sat/Unsat Only.~~ Instructor Option.



Major Change to Existing Programs

College of Engineering

Effective Fall 2016

Department of Electrical & Computer Engineering

Major in Electrical Engineering, Lasers and Optical Engineering Concentration

In order to maintain professional standards required of practicing engineers, the Department of Electrical and Computer Engineering requires a cumulative grade point average of at least 2.000 in Electrical Engineering courses as a graduation requirement. It is the responsibility of any student who fails to maintain a 2.000 average to work with his or her advisor to correct grade point deficiencies. In addition, it is required that students retake any Electrical Engineering course at the 300 level or below in which they receive a grade below a C.

FRESHMAN

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
Select 3-4 credits from the following:		-	3-4
<u>Select one group from the following:</u> ¹		-	3-4
<u>Group A:</u>		-	-
<u>CS 155</u>	Introduction to Unix		
<u>CS 156</u>	Introduction to C Programming I		
<u>CS 157</u>	Introduction to C Programming II		
<u>CS-160</u>	Foundations in Programming	-	-

<u>Group B:</u>		-	-
<u>CS 163</u>	<u>Java (CS1) No Prior Programming</u>	-	-
<u>or CS 164</u>	<u>Java (CS1) Prior Programming</u>	-	-
<u>ECE 102</u>	Digital Circuit Logic		4
<u>ECE 103</u>	DC Circuit Analysis		3
<u>MATH 160</u>	Calculus for Physical Scientists I (GT-MA1)	1B	4
<u>MATH 161</u>	Calculus for Physical Scientists II (GT-MA1)	1B	4
<u>PH 141</u>	Physics for Scientists and Engineers I (GT-SC1)	3A	5
<u>Historical Perspectives</u>		3D	3
Additional Requirements for Graduation ^{1,2}			0
Total Credits			30

SOPHOMORE

<u>CHEM 111</u>	General Chemistry I (GT-SC2)	3A	4
<u>ECE 202</u>	Circuit Theory Applications		4
<u>ECE 303</u>	<u>Introduction to Communications Principles</u>	-	3
<u>ECON 202</u>	Principles of Microeconomics (GT-SS1)	3C	3
<u>MATH 261</u>	Calculus for Physical Scientists III		4
Select one from the following:			4
<u>MATH 340</u>	Introduction to Ordinary Differential Equations		
<u>MATH 345</u>	Differential Equations		
<u>PH 142</u>	Physics for Scientists and Engineers II (GT-SC1)	3A	5
<u>PH 314</u>	Introduction to Modern Physics		4
<u>Arts and Humanities</u>		3B	3
Additional Requirements for Graduation ^{1,2}			0
Total Credits			31

JUNIOR

Select one from the following:			3
<u>CO 301B</u>	Writing in the Disciplines: Sciences (GT-CO3)	2	
<u>JTC 300</u>	Professional and Technical Communication (GT-CO3)	2	
<u>ECE 311</u>	Linear System Analysis I		3
<u>ECE 331</u>	Electronics Principles I		4
<u>ECE 332</u>	Electronics Principles II	4A	4
<u>ECE 341</u>	Electromagnetic Fields and Devices I		3
<u>ECE 342</u>	Electromagnetic Fields and Devices II		3
<u>PH 353</u>	Optics and Waves		4
<u>Arts and Humanities</u>		3B	3
<u>Global and Cultural Awareness</u>		3E	3

60

Science/Engineering Elective (see list below)	3
Additional Requirements for Graduation ^{1,2}	0
Total Credits	33

SENIOR

<u>ECE 303/STAT 303</u>	Introduction to Communications Principles	-	3
<u>ECE 401³</u>	Senior Design Project I	4A,4B	3
<u>ECE 402</u>	Senior Design Project II	4C	3
<u>ECE 404</u>	Experiments in Optical Electronics		2
<u>ECE 441</u>	Optical Electronics		3
<u>ECE 457</u>	Fourier Optics		3
<u>PH 451</u>	Introductory Quantum Mechanics I		3
Technical Electives (see list below)			12
<u>Arts and Humanities</u>		3B	3
Additional Requirements for Graduation ^{1,2}			0
Total Credits			32

Program Total Credits: 126

Code	Title	Credits
Science/Engineering Electives		
<u>BC 351</u>	Principles of Biochemistry	4
<u>BIOM 306/BTEC 306</u>	Bioprocess Engineering	4
<u>BMS 300</u>	Principles of Human Physiology	4
<u>BMS 301</u>	Human Gross Anatomy	5
<u>BMS 325</u>	Cellular Neurobiology	3
<u>BMS 345</u>	Functional Neuroanatomy	4
<u>BZ 310</u>	Cell Biology	4
<u>CHEM 112</u>	General Chemistry Lab I (GT-SC1)	1
<u>CHEM 245</u>	Fundamentals of Organic Chemistry	4
<u>CHEM 246</u>	Fundamentals of Organic Chemistry Laboratory	1
<u>CIVE 260</u>	Engineering Mechanics-Statics	3
<u>CS 122/MATH 122</u>	Theory for Introductory Programming	1
<u>CS 155</u>	Introduction to Unix ^{3,1}	1
<u>CS 156</u>	Introduction to C Programming I ^{3,1}	1
<u>CS 157</u>	Introduction to C Programming II ^{3,1}	1
<u>CS 161</u>	Object-Oriented Problem Solving	4
<u>CS 165</u> or <u>CS 200</u>	Java (CS2) Data Structures and Algorithms Algorithms and Data Structures	4
<u>CS 220</u>	Discrete Structures and their Applications	4

Code	Title	Credits
<u>CS 253</u>	Software Development with C++	4
<u>CS 370</u>	Operating Systems	3
<u>ECE 395</u>	Course ECE 395 Not Found ⁴	1-18
May select any course from the following:		Var.
<u>ECE 395A</u>	Independent Study ⁴	
<u>ECE 395B</u>	Independent Study: Open Option Project ⁴	
<u>ECE 395C</u>	Independent Study : Vertically Integrated Project ⁴	
<u>HES 307</u>	Biomechanical Principles of Human Movement	3
<u>LIFE 103</u>	Biology of Organisms-Animals and Plants	4
<u>MATH 151</u>	Mathematical Algorithms in Matlab I	1
<u>MATH 229</u>	Matrices and Linear Equations	2
<u>MATH 332</u>	Partial Differential Equations	3
<u>MATH 366</u>	Introduction to Abstract Algebra	3
<u>MATH 369</u>	Linear Algebra I	3
<u>MECH 237</u>	Introduction to Thermal Sciences ⁵	3-4
or <u>MECH 337</u>	Thermodynamics ⁵	
<u>MECH 303</u>	Energy Engineering	3
<u>MIP 300</u>	General Microbiology	3
<u>PH 341</u>	Mechanics	4
<u>PH 353</u>	Optics and Waves	4
Code	Title	Credits
Technical Electives		
<u>BIOM 526/ECE 526</u>	Biological Physics	3
<u>BIOM 470/MECH 470</u>	Biomedical Engineering	3
<u>BIOM 570/MECH 570</u>	Bioengineering	3
<u>ECE 411</u>	Control Systems	4
<u>ECE 412</u>	Digital Control and Digital Filters	3
<u>ECE 444</u>	Antennas and Radiation	3
<u>ECE 450</u>	Digital System Design Laboratory	1
<u>ECE 451</u>	Digital System Design	3
<u>ECE 461</u>	Power Systems	3
<u>ECE 462</u>	Power Systems Laboratory	1
<u>ECE 471A</u>	Semiconductor Physics	1
<u>ECE 471B</u>	Semiconductor Junctions	1
<u>ECE 495</u>	Course ECE 495 Not Found	1-18

62

Code	Title	Credits
May select any course from the following:		Var.
<u>ECE 495A</u>	<u>Independent Study</u> ⁴	
<u>ECE 495B</u>	<u>Independent Study: Open Option Project</u> ⁴	
<u>ECE 495C</u>	<u>Independent Study: Vertically Integrated Projects</u> ⁴	
<u>ECE 503</u>	Ultrafast Optics	3
<u>ECE 504</u>	Physical Optics	3
<u>ECE 505</u>	Nanostructures: Fundamentals and Applications	3
<u>ECE 506</u>	Optical Interferometry and Laser Metrology	3
<u>ECE 507</u>	Plasma Physics and Applications	3
<u>ECE 520</u>	Optimization Methods-Control and Communication	3
<u>ECE 525</u>	Fiber Optic Communications	3
<u>ECE 526</u>	Biological Physics	3
<u>ECE 546</u>	Laser Fundamentals and Devices	3
<u>ECE 571</u>	VLSI System Design	3
<u>ECE 572</u>	Semiconductor Transistors	1
<u>ECE 573</u>	Semiconductor Optoelectronics Laboratory	3
<u>ECE 574</u>	Optical Properties in Solids	3
<u>ECE 575</u>	Experiments in VLSI System Design I	1
ECE 58* Experimental Courses in Lasers/Optics Topics		
<u>MATH 419</u>	Introduction to Complex Variables	3
<u>PH 315</u>	Modern Physics Laboratory	2
<u>PH 425</u>	Advanced Physics Laboratory	2
<u>PH 452</u>	Introductory Quantum Mechanics II	3
<u>PH 462</u>	Statistical Physics	3

- ¹ CS 155, CS 156, and CS 157 count as Science/Engineering electives ONLY when CS 163 or CS 164 is also taken. CS 163 or CS 164 will be applied to the freshman year selection requirement. Students are required to participate in the Professional Learning Institute (PLI) program as a requirement for graduation. The program consists of eleven PLI workshops distributed by focus areas as follows: Global and Cultural Diversity (2 workshops), Innovation (2 workshops), Leadership (2 workshops), Civic and Public Engagement (2 workshops), and Ethics (3 workshops). Each workshop is between 1-2 hours long and no outside preparation is required to attend any of the workshops. Attendance at the required workshops may be spread over the student's four-year program.
- ² Students are required to participate in the Professional Learning Institute (PLI) program as a requirement for graduation. The program consists of eleven PLI workshops distributed by focus areas as follows: Global and Cultural Diversity (2 workshops), Innovation (2 workshops), Leadership (2 workshops), Civic and Public Engagement (2 workshops), and Ethics (3 workshops). Each workshop is between 1-2 hours long and no outside preparation is required to attend any of the workshops. Attendance at the required workshops may be spread over the student's four-year program. Project must be a laser and optical engineering topic.
- ³ Project must be a laser and optical engineering topic. CS 155, CS 156, and CS 157 count as Science/Engineering electives only when taken with CS 160. CS 160 will be applied to the freshman year selection requirement.
- ⁴ A total 3 credits of Independent Study may apply toward degree requirements. This includes credit awarded for ECE 395A, ECE 395B, ECE 395C and ECE 495A, ECE 495B, ECE 495C combined. Only 3 credits of Independent Study may apply to degree requirements. Credit for ECE 395 and ECE 495 for a total of 3 credits of Independent Study that may apply toward degree requirements.

6.3

University Curriculum Committee
April 15, 2016
Page 8

5 ~~Students may take either MECH 237 or MECH 337 to fulfill degree requirements. Credit will not be counted for both toward the degree.~~



The meeting adjourned at 3:05 p.m.

(D)

Carole Makela, Chair
Shelly Ellerby, Curriculum Liaison Specialist

64

April 27, 2016

TO: Mary Stromberger, Chair
Executive Committee and Faculty Council

FROM: Carole Makela, Chair
University Curriculum Committee

SUBJECT: New Degree: PhD in Communication

The University Curriculum Committee moves Faculty Council adopt the following:

A new PhD in Communication be established effective Fall 2017
in the Department of Communication Studies, College of Liberal Arts.

According to the request submitted:

Description:

The PhD in Communication trains scholars, teachers, and professionals to engage social, political, and professional challenges using advanced expertise in the field of Communication.

The program is shaped by the three areas of expertise present in our department. These three areas examine communication and engagement from three perspectives: 1) interpersonal, intercultural, and organizational communication; 2) media and visual culture, 3) rhetoric and civic engagement.

Rationale:

Departments of Communication Studies throughout the U.S. continue to grow in enrollment and faculty. Part of this growth can be attributed to the ways in which the discipline responds to the challenges of the 21st century. The last decade has seen the Department of Communication Studies at Colorado State University grow into a community of scholars dedicated to the development of individuals and citizens who are professionally, culturally, and critically engaged. Our 16 active scholars and teachers working in diverse areas within the discipline of Communication focus on the ways in which relational, organizational, mediated, and rhetorical communicative practices create and sustain interpersonal, professional, and civic cultures. The PhD builds on the nationally recognized MA program and will provide innovative PhD training for students desiring careers both within and outside of academia.

The request was reviewed and approved by the Committee on Scholarship, Research and Graduate Education on 3/3/16 and by the University Curriculum Committee on 3/25/16.

Attachment

65



Colorado State University

PROGRAM CHANGE REQUEST

NEW PROGRAM PROPOSAL

Date Submitted: 09/28/15 3:38 pm

VIEWING: **PH.D. IN COMMUNICATION**

LAST EDIT: 04/09/16 1:45 PM

Changes proposed by: 830178903

APPROVAL PATH

1. 09/28/15 3:39 pm, John Crowley (John.Crowley): Approved for 1783 College Curriculum Committee Representative
2. 09/28/15 7:56 pm, Greg Dickinson (gdickins): Approved for 1783 Chair
3. 10/15/15 1:29 pm, Michael Hogan (Michael.Hogan): Approved for LA University Curriculum Committee Rep
4. 10/15/15 4:47 pm, Kelly Long (klong): Approved for LA Associate Dean
5. 02/11/16 11:32 am, Jodie Hanzlik (jodie.hanzlik): Approved for Dean Graduate School
6. 02/16/16 10:25 am, Shelly Ellerby (shelly.ellerby): Approved for UCC Secretary
7. 02/22/16 8:08 am, Carrie Middleton (carrie.middleton): Approved for CoSRGE prep
8. 03/03/16 2:31 pm, Donald Samelson (Donald.Samelson): Approved for CoSRGE Chair
9. 03/04/16 8:28 am, Carrie Middleton (carrie.middleton): Approved for RO Banner - prep
10. 03/07/16 12:52 pm, Kathy Duquoin (Kathy.Duquoin): Approved for Provost
11. 03/31/16 4:34 pm, Shelly Ellerby (shelly.ellerby): Approved for UCC Secretary
12. 04/09/16 1:46 pm, Carole Makela (makela): Approved for University Curriculum Committee Chair - pending
13. 04/09/16 2:05 pm, Carole Makela (makela): Approved for University Curriculum Committee Chair - Approved
14. Curriculum Liaison Specialist - hold for FC approval
15. RO Banner - approved
16. Program Code
17. CIP Code
18. Provost - Board of Governors
19. Provost - CCHE
20. HOLD for Future Catalog

Proposal Contact(s)

Name	Title	Phone	E-mail
John Crowley	Tenure Track Faculty	970-491-6140	john.crowley@colostate.edu

66

Program available to students: Fall 2017

College: Liberal Arts

Department/Unit: 1783 - Communication Studies

Academic Level: Graduate

Program Type: Degree

Degree Type: PHD - Doctor of Philosophy

Program Title: Ph.D. in Communication

Program Description

The Ph.D. in Communication trains scholars, teachers, and professionals to engage social, political, and professional challenges using advanced expertise in the field of Communication.

The program is shaped by the three areas of expertise present in our department. These three areas examine communication and engagement from three perspectives:

1) **Interpersonal, Intercultural, and Organizational Communication**

For many individuals, engagement with the public world grows out of their relational lives and is expressed in the organizations to which they belong and in which they work. Professors and students in this area will explore communication in relational or interpersonal systems, organizing and work contexts, and within national and global arenas. Here, the focus is on exploring how individuals respond to and participate as active members in various forms of community, paying special attention to the ways in which communicative actions can create, sustain, and disable engaged citizenship.

2) **Media and Visual Culture**

In the contemporary, globalized world, engaged citizenship often flows through media and is represented and enacted within popular culture. Professors and students in the area explore the mediation of public culture with particular attention to film, television, digital discourse, and the globalization of media institutions. Here, the focus is on the construction of critical media literacies and understandings of how our mediated forms of communication engage or disengage individuals as community members, empowering or disempowering them as political agents.

3) **Rhetoric and Civic Engagement**

In popular conversation, "rhetoric" is often understood to mean empty speech. Communication scholars, however, trace the meaning of "rhetoric" to antiquity when thinkers such as Aristotle and Cicero placed rhetorical studies at the center of democratic engagement. Since then, rhetorical studies have explored public engagement and community building, examining the role of communication in civic life. The resurgence of rhetorical studies in the humanities is founded on a renewed sense of the importance of rhetoric to engaged citizenship in the 21st century. Professors and students in this area explore the role of public communication in creating, maintaining, and undermining civic culture.

Although these three areas of departmental emphasis are distinct, the signal strength of the program is the collaborative overlapping of these three areas. As a community, we have developed a cutting-edge doctoral program that takes advantage the shared commitment to study and engage in transformative communication.

Program Catalog Copy

The Ph. D. in Communication prepares scholars, teachers, and practitioners in three broad areas of communication studies: 1) interpersonal, intercultural, and organizational communication; 2) media and visual culture, 3) rhetoric and civic engagement.

Part of state-wide agreement

No

Offered as

Main Campus Face-to-Face and Online

Justification for Request

Departments of Communication Studies throughout the U.S. continue to grow in enrollment and faculty. Part of this growth can be attributed to the ways in which the discipline responds to the challenges of the 21st century. The last decade has seen the Department of Communication Studies at Colorado State University grow into a community of scholars dedicated to the development of individuals and citizens who are professionally, culturally, and critically engaged. Our 16 active scholars and teachers working in diverse areas within the discipline of Communication focus on the ways in which relational, organizational, mediated, and rhetorical communicative practices create and sustain interpersonal, professional, and civic cultures. The PhD builds on the nationally recognized MA program and will provide innovative PhD training for students desiring careers both within and outside of academia.

Program Level Learning Objectives

6 Program Learning Goals (minimum of 4):

- a) Students will achieve expertise in one of our 3 areas of disciplinary emphasis (Rhetoric & Civic Engagement; Media and Visual Culture; Interpersonal, Intercultural, and Organizational Communication) or in a combination of those areas of emphasis suited to the students' professional goals.
- b) Students who desire a career in academe will be qualified to take tenure-track positions at research universities, private colleges and universities, and community colleges.
- c) Students who desire a career outside of academe will be qualified to take positions in a wide variety of professional arenas (e.g. communication research associates, consultants advising public and professional entities regarding best practices in interpersonal, organizational, and intercultural communication, deliberation specialists who can secure funding and design processes for deliberative engagement that result in better decision-making for communities, states, corporations, etc.)
- d) Students will produce a dissertation that makes a unique scholarly contribution to the field of Communication Studies.
- e) Students will master a variety of quantitative and qualitative research methods, enabling them to offer multi-methodological expertise to employers in academic, professional, or civic spheres.
- f) Students will become adept at writing for scholarly, public, and professional audiences and will learn how to present their research in diverse contexts: academic books and journals, technical reports, deliberative processes, oral presentations, editorials, blogs, digital media, etc.

68

Program Requirements

Students must have earned an MA in Communication Studies. A maximum of 27 credits at the master's degree level may be accepted toward the Ph.D.

Code	Title	Credits
Master Degree Credit		27
The following prerequisite courses should be included/transferred in from the MA degree: ¹		
<u>SPCM 601</u>	History of Rhetorical Theory	
<u>SPCM 612</u>	Rhetorical Criticism	
<u>SPCM 638</u>	Communication Research Methods	
<u>SPCM 639</u>	Communication Theory	
<u>SPCM 646</u>	Media Theory	
<u>SPCM 675</u>	Speech Communication Pedagogy	
Required PhD Courses		54
<u>SPCM 701</u>	Seminar in Academic Writing	3
<u>SPCM 702</u>	Professional Writing and Public Scholarship	3
<u>SPCM 712</u>	Critical/Cultural Analysis in Communication	3
<u>SPCM 793</u>	Seminar: Communications Research Methods	3
<u>SPCM 798</u>	Research	6
<u>SPCM 799</u>	Dissertation	12
SPCM Graduate Electives		24
Program Total Credits		81

A minimum of 81 credits are required to complete this program.

¹ If equivalent coursework is not transferred in as part of the MA degree, these prerequisite courses must be completed in addition to the 54 credits required for the PhD.

Additional Information

Affected Departments

Attach File(s) [CMST PhDproposal_Phase1_12-12-14.docx](#)

Attach File(s) [CMST PhDproposal_Budget_Phase1_12-12-14_1-5SIreduction.xlsx](#)

Attach File(s) [Memo_PhD Communication Studies.doc](#)

Attach File(s) [CommStudiesPhDProposal_Phase1Deans_3-30-15.pdf](#)

69

MEMORANDUM

Date: March 22, 2016

To: Mary Stromberger, Chair, Faculty Council

From: Eric Prince, Chair, Committee on University Programs

Re: Approval of new CIOU application

The Committee on University Programs submits the following for Faculty Council approval.

The application was received, examined in full and approved by the CUP as follows:

New CIOU

Center for Meaning and Purpose
(Director, Michael F. Steger, Department of Psychology)

☐ Existing CIOSU
☒ New CIOSU

Application/Registration

Colorado State University Centers, Institutes and Other Special Units

Name of individual completing this application: Michael Steger

Telephone Number: 9704917324

Date: 1/11/2016

Requested Start Date for this Center/Institute/Laboratory: April 1, 2016

1. Name of proposed Center or Institute or Other Special Unite (CIOSU):
Center for Meaning and Purpose

2. Name, Title, telephone number, and signature of administrative director(s) of proposed CIOSU (See Academic Faculty/Administrative Professional Manual, Section B.2.6.5, last paragraph).

Michael F. Steger, Associate Professor	9704917324	
Name	Title	Tel #
Signature		

215 BSB, Fort Collins, CO 80523-1876	9704911032	michael.f.steger@colostate.edu
Address	Fax #	E-mail Address

Click here to enter text.

Name	Title	Tel #	Signature
------	-------	-------	-----------

Click here to enter text.

Address	Fax #	E-mail Address
---------	-------	----------------

Overseeing Administrator: (responsible for making initial recommendation to continue, consolidate, or terminate a CIOSU during the biennial reporting process)

Click here to enter text.

Name	Title	Tel #	Signature
------	-------	-------	-----------

Click here to enter text.

College/Address	Fax #	E-mail Address
-----------------	-------	----------------

How administrative director was selected: Dr. Steger has had an active research program for more than 15 years in the area of Meaning and Purpose, and is an acknowledged and sought-after international expert on the broader area of positive psychology, within which Meaning and Purpose scholarship is included. Further, he has extensive experience presenting and teaching keynotes, lectures, workshops, and courses in positive psychology and Meaning and Purpose. Therefore, he is an appropriate choice to lead the **Center for Meaning and Purpose (CMAP)**.

3. Mission of proposed unit and how this mission relates to the mission and strategic goals of Colorado State University. (Concise summary of 100 words or less)

The **Center for Meaning and Purpose** mission is to become a leading resource locally and globally through multifaceted and multidisciplinary approaches to creating, disseminating, and applying science toward enabling people, organizations, and societies to create meaning, well-being, positive health, and quality of life. The mission aligns with CSU's teaching, research, and service priorities in numerous ways, such as by providing:
Teaching: Existing and new courses and degree programs in positive psychology;
Research: Research on meaning, purpose and well-being, with particular emphasis on funding graduate student research; **Service:** Fostering and serving community partnerships through workshops, seminars, events, and consultation.

4. Statement of goals and/or objectives of the proposed unit.
 The CSU **CMAP** will offer a collaborative organization to stimulate and leverage faculty teaching and research, provide quality research and service opportunities to graduate students, engage community partners through events and collaborations, and build traction points for international partners in the research and application of scientific knowledge about meaning, well-being, positive health, and quality of life (see Appendix 1 for additional information). The primary goals of the CSU **CMAP** are to:

- Create undergraduate-level resident instruction and online positive psychology courses
- Build a Masters of Positive Psychology (MAPP) to serve the growing yet unmet interest in advanced education in positive psychology
- Promote Master Classes in a variety of topics within positive psychology that showcase the expertise of CSU faculty
- Generate cutting-edge research on meaning and purpose
- Stimulate collaborative research relevant to well-being, happiness, positive health, and quality of life broadly considered
- Fund graduate student research on meaning, purpose, well-being, positive health, and quality of life through competitive application reviews
- Enrich the Front Range community through hosting workshops, distinguished speakers, open roundtable meetings, and providing news releases and tip sheets

describing practical tips for increasing well-being drawn from cutting edge research

- Cultivate public-private partnerships with regional and international businesses and organizations to disseminate knowledge and provide training to CMAP faculty and students
- Reinforce and deepen the expertise and dissemination competence of CSU and CMAP faculty and students through support of professional development activities

5. The purpose/mission of this CIOSU does not overlap/duplicate that of other existing CIOSUs.

True ☒ False ☐

(If it does, please attach a separate page describing/explaining the duplication and how the proposed CIOSU will be coordinated with other CIOSUs with similar or complementary functions.)

6. Name(s) of Colorado State University unit(s) [Department(s)/College(s)] with which this CIOSU will be affiliated.

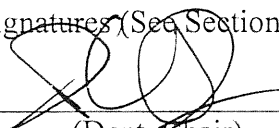
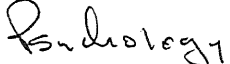
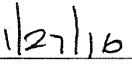
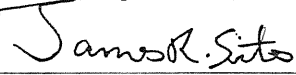
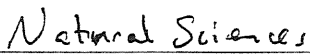
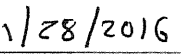
Department of Psychology in the College of Natural Sciences

7. On a separate single sheet, using both front and back if needed, please provide a description of (a) the organizational and administrative structure and responsibilities, (b) the personal involved, (c) how the CIOSU will be internally governed, and (d) a summary budget showing funding sources and amounts, and expenses such as space, personnel salaries, equipment and other resources required. The budget should include sufficient detail to indicate program viability for a period of at least five years. If funding sources have not been secured, the applicant should indicate potential sources, amounts and an approximate time-frame for securing such funds.

Information requested is provided in Appendix 2.

8. CSU Business and Financial Services is available to provide CIOSUs guidance in implementing proper controls over the sales of goods and services. Does the proposed CIOSU plan to charge a fee for the sale of goods and/or services: ☒ Yes ☐ No

Signatures (See Section B.2.6.3 of the Manual)

 _____ (Dept Chair)	 _____ (Department)	 _____ (Date)
 _____ (Dean)	 _____ (College)	 _____ (Date)
_____	_____	_____

(Dept. Chair)

(Department)

(Date)

(Dean)

(College)

(Date)


Date Received: Click here to enter text. Month/Year for start of CIOUSU: Click here to enter text.

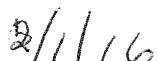
Anticipated month/year for formal evaluation: Click here to enter text.

Signatures:

(Chair, Faculty Council)

(Date of FC/Committee Action)


 (Provost or Vice President for Research)


 (Date of Approval)
Responsible Administrator: ☐ Provost ☒ VP for Research ☐ Other: _____

Applicant: Forward this application to the Office of Faculty Council, which will forward a copy to the Provost. The Provost shall act as or assign the Responsible Administrator for the proposed CIOUSU based on its primary mission (See Section B.2.6.3 of the Manual).

**If approved, the CIOUSU will be subject to periodic evaluations.
 (See Section B.2.6.6 of the Manual).**

(Revised 1/14)

ATTACHMENT 1

Center Rational and Alignment with CSU Mission

Despite rapidly increasing public interest in topics such as “happiness,” “meaning,” and “flourishing” there is no identifiable center of associated expertise in the United States between Lawrence, KS and Claremont, CA. CMAP seeks to forge a leading role for Colorado State University (CSU) and the Front Range community in this burgeoning field by establishing a world-class reputation for cutting edge research, teaching, and service in meaning, purpose, and positive psychology.

Meaning in life is broadly defined as the degree to which people judge their lives to be meaningful, significant, comprehensible, and endowed with overarching purpose or mission. Meaning and purpose in life have been the subject of increasing interest, as evidenced by escalating growth in journal articles, scholarly books, academic conferences, citations in the popular media, and applications to the business world. CMAP seeks to take advantage of this increasing interest by crystalizing it and giving it a focal point at CSU, magnifying it through high-quality output from multiple streams of activities, and disseminating knowledge about meaning and purpose through teaching and outreach while also generating revenue.

CMAP will have three primary domains of activity: Education, Research, and Outreach. Each domain is intended to have reciprocal benefits for the others. For example, through education and outreach, the visibility of CMAP is elevated, potentially leading to new research funders, topics, or populations; through research and education, high quality information is generated and refined so that it can be disseminated through outreach; through outreach, community members can convey the real-world concerns they face, which can inform research and generate new educational initiatives. Through these domains, CMAP aims to be the leading

resource for well-being and meaning in life content in the Fort Collins and Front Range community, and eventually to be a highly visible and esteemed voice globally.

Aligning CMAP with CSU's Mission

CMAP's mission aligns with the **teaching, research, and service/outreach** missions of the university and contributes in the following ways:

CMAP's **TEACHING** mission will be focused on three primary initiatives (undergraduate positive psychology courses, Master's in Applied Positive Psychology, Master Classes), all of which are expected both to disseminate cutting edge research and application on the science of living a meaningful, fulfilling, happy life.

- The first initiative will be the creation of undergraduate-level resident instruction and online positive psychology courses. Currently, plans are to offer the first course in both formats beginning Spring 2016. CMAP will weigh opportunities to create certifications as teaching capacity increases and as other existing or new courses are identified. An example of a course that might be included in a certification is Psychology of Happiness which has been taught to large enrollments for several years as a summer course. Positive psychology courses almost always include self-application of positive psychology principles and techniques, so they are consistent with CMAP's interest in benefitting others through its activities.
- The second initiative will be the creation of a Masters of Positive Psychology (MAPP). Currently there is one such course in the United States, and roughly two dozen throughout the world. The "gold standard" MAPP is a 1-year program housed at University of Pennsylvania, which has a 50% rejection rate, enrolls 40 students per year, charges more than \$50,000 per year, and requires students to attend monthly meetings in

- Philadelphia. Admitted students tend to be highly accomplished in their pre-MAPP professions and remain active contributors to and/or vociferous advocates for the program. CMAP's program would seek to take advantage of CSU's experts in Counseling and Industrial/Organizational psychology to offer an alternative to the Penn MAPP program. There are several important advantages to creating a MAPP: (a) global visibility, all the MAPP programs around the world are in communication with each other; (b) revenue through tuition and fees, demand continues to increase even as new programs are launched, and given the benchmark established by Penn's program as well as the number of applicants they deny, there is almost certainly a pool of prospective students who would be willing to invest in the education, training, and networking our program would provide; (c) increased alumni networking and engagement, following other MAPPs around the world, we will seek to maintain active involvement from our graduates, which is especially appealing as application criteria will include prior professional accomplishment and a strong sense of purpose and motivation.
- The third initiative will be offering Master Classes in a variety of topics within positive psychology. These classes tend to attract students seeking close contact with leading experts and luminaries in the field and ways to apply the research knowledge within content areas. It is expected that Master Classes would generate both visibility and revenue for CMAP and CSU. There is already considerable expertise at CSU that could be marketed through Master Class offerings. In addition, as notable speakers are brought to CSU as part of CMAP's Outreach programming, their talks and lectures could be compiled into briefer course Master Classes and hosted online for a wider audience, assuming permission and revenue-sharing agreements with the speakers are secured.

CMAP's **RESEARCH** mission will focus on three initiatives (core research, collaborative research, funding graduate student research), which are consistent with the scientific foundations of the center and will generate the basic knowledge the other initiatives are intended to implement and disseminate. CMAP's research mission will be vital to increase competitiveness for grant funds.

- The first research initiative will be core research. Core research includes basic and applied research on meaning and purpose. This research initiative has comprised the bulk of Dr. Steger's scholarly activities, leading to more than 100 journal articles, academic books, and book chapters, as well as to the development of the most widely used instrument for measuring meaning in life in the world, and more than 50 international invited keynote, lectures, and addresses. It is important that CMAP help encourage continued progress in this core research initiative because (a) meaning and purpose are the central scholarly areas of CMAP, (b) such research enables CMAP's affiliated faculty and graduate students to continue to contribute to the research mission of CSU, and (c) there is a growing need for more innovative and sophisticated research in meaning and purpose in life. It is only through attracting excellent researchers that basic research knowledge will be built to inform educational and outreach programming.
- The second research initiative will be collaborative research. Collaborative research is intended to broaden the scope of research activities to include investigations relevant to well-being, happiness, positive health, and quality of life broadly considered. This research initiative also is intended to bring attention to the value of research collaborations and multidisciplinary research. Among the benefits of such research are exposure to different methods, samples, theories, and perspectives, as well as increased

visibility and influence through national and international research partnerships.

Collaborative research will allow CMAP to produce a broader range of research products and engage in research that is timely.

- The third research initiative will be funding graduate student research. CSU provides graduate students with numerous resources for facilitating their research. At the same time, research funding for meaning in life focused projects is scarce, and the best research questions are expensive to study whether due to the need for specialized samples (e.g., trauma survivors or cancer patients) longitudinal research designs (e.g., studying meaning and longevity or recovery from addiction/disease), or equipment (e.g., brain imaging apparatus). To support the future growth of meaning and purpose in life research, as well as to support the research mission of CSU, CMAP will endeavor to provide research grants to graduate students on an annual basis, depending upon available center funds. There are many benefits to funding graduate student research, including the publicity that accompanies award announcements, supporting the best and brightest graduate students, and expanding the number of people engaged in high quality meaning in life research.

CMAP's **SERVICE/OUTREACH** mission will include a large number of activities, with thematic focus on benefitting the Fort Collins/Front Range community, developing public-private partnerships with regional and international businesses and organizations, and deepening the expertise and dissemination competence of CMAP personnel.

- The first theme is the most important for CMAP. Within Front Range communities and universities, there is an abundance of groups, organizations, and other resources that could be brought together to make this region a national center of interest for well-being and meaning in life expertise. Examples include CSU's own Center for Mindfulness, the

Aspen Ideas Festival, Naropa's Meditation Center, Boulder Innovation Forum, the Purposeful Planning Institute, and the Shambhala Meditation Center. CMAP would work to achieve similar levels of visibility and community impact by bringing high quality educational and experiential events to Fort Collins. The short-term benefits of these efforts would be the direct experience of those who attend CMAP events. The long-term benefits would be ongoing contribution to Fort Collins' reputation as a center for innovation and high quality of life. Additional initiatives will deliver benefits to members of the community by hosting meaning in life workshops designed to increase the meaning and quality of life of attendees, hosting open roundtable meetings with invited speakers, and providing newsletters and other forms of communication describing practical tips for increasing well-being drawn from cutting edge research. In short, CMAP will seek to become an active and visible community resource.

- The second theme is developing public-private partnerships with regional and international businesses and organizations. As the long-term goal for CMAP is to become a valued resource both locally and globally, partnering with regional and international businesses and organizations provides the assistance of higher visibility, broader networking opportunities, possibilities for providing programming that expands the expertise and revenue sources for CMAP, and the potential to gain access to real-world samples for ongoing research and intervention explorations. Activities included in this theme include providing keynotes, presentations, workshops, and trainings on the topics of CMAP's expertise. CMAP personnel at all levels would have the opportunity to participate in these partnerships, whether they are the director, affiliated faculty, or graduate students. A further advantage of entering into public-private partnerships

through CMAP is that, at least initially, a large proportion of CMAP personnel will likely be members of the Counseling Psychology program, which has a substantial applied interest. CMAP would create novel ways for students and faculty interested in applying the science of meaning and purpose to pursue their interests and broaden their experiences. Among the other programs that are anticipated to be interested in CMAP affiliation, the Industrial/Organizational and Applied Social and Health Psychology programs also have strong applied components. CMAP would be another way to address those interests. It is the intention that such partnerships should also generate revenue for CMAP to support its other programs.

- The third theme is deepening the expertise and dissemination competence of CMAP personnel. It is important for CMAP to contribute to the mission of CSU, the College of Natural Sciences, and the Psychology Department. An additional way in which CMAP can contribute is through generating opportunities for CMAP personnel to increase their expertise, including mastery of the knowledge base in meaning, well-being, positive health, and quality of life. CMAP will do this by bringing in content experts as speakers to present at CSU and spend time with CMAP. CMAP also will seek to financially support personnel to attend academic and professional conferences and meetings that fit within the scope of CMAP topics of interest. CMAP also will support the development of abilities to disseminate knowledge through exposure to high quality speakers and presenters, as well as through generating opportunities to present material, such as through an annual conference, community workshops, conference presentations, and other presentation opportunities.

ATTACHMENT 2

Organizational Structure, Personnel, Budget, Space

Center Name

Colorado State University Center for Meaning and Purpose (CMAP)

Organizational Structure

The central mission of CMAP is to become a leading resource locally and globally through multifaceted and multidisciplinary approaches to creating, disseminating, and applying science toward enabling people, organizations, and societies to create meaning, well-being, positive health, and quality of life. CMAP intends to pursue this mission through incremental and organic growth, bootstrapping revenue-neutral resources to create revenue-generating teaching and outreach resources, then investing those resources in additional program rollout. Thus, the initial personnel commitment requirements are focused and modest. The initial organizational structure of CMAP will be streamlined to reflect the focus of the center on developing budget-positive programming. The organizational structure of CMAP is anticipated to change significantly once the Masters in Positive Psychology program (MAPP) is launched, and therefore an organizational structure is presented below for years 1-3 and for years 4-5 separately.

Organizational Structure Years 1-3

Roles: Director, Faculty Affiliate, Graduate Assistant

Personnel: Michael Steger, Bryan Dik, Bradley Conner, Aaron Eakman, Zachary Johnson, Jessica Morse

Michael Steger, PhD, will serve as the director of CMAP, overseeing all aspects of its growth and development, including the development and teaching of undergraduate level

courses, the creation of the Masters in Positive Psychology program, identification and cultivation of partnerships and collaborations, and development of outreach workshops, talks, and classes.

Bryan Dik, PhD, Associate Professor of Counseling Psychology will serve as a Faculty Affiliate of CMAP. His research concerns positive career development and work as a calling, which are thematically linked with the content domains of CMAP. Dr. Dik would be able to contribute research, teaching, and outreach expertise in these areas. Further, Dr. Dik has direct expertise with translating research into application through his partnership with CSU Ventures. It is anticipated that Dr. Dik would teach coursework on Fostering Organizational Well-Being in the MAPP program, provide guest lectures in the undergraduate classes, and potentially offer outreach workshops to CSU students and the Fort Collins community.

Bradley Conner, PhD, Associate Professor of Counseling Psychology will serve as a Faculty Affiliate of CMAP. His research concerns risk-taking, impulsivity and behavioral health threats, including substance use. Dr. Conner would be able to contribute extensive expertise in clinical psychology and psychological treatment, and it is anticipated that Dr. Conner would teach coursework on Positive Clinical Psychology in the MAPP program, which is a rapidly emerging area of interest for both traditional therapeutic disciplines (e.g., counseling psychology, clinical psychology, social work, marriage and family therapy) and positive psychology.

Aaron Eakman, PhD, Assistant Professor of Occupational Therapy will serve as a Faculty Affiliate of CMAP. His research investigates the benefits of meaningful activity to people's well-being. In addition, he has experience evaluating assessment tools used to gauge people's well-being and desire for more meaningful activity. Dr. Eakman would be able to contribute his expertise in this highly compatible area of research, and his participation in CMAP would enable

his graduate students to access the knowledge and resources of CMAP. It is anticipated that Dr. Eakman would be able to collaborate on research funding proposals, as well.

Zachary Johnson, MLA, Associate Professor of Horticulture and Landscape Architecture will serve as a Faculty Affiliate of CMAP. His professional activities span teaching and industry partnership in the areas of landscape and green industry design. Dr. Johnson has extensive expertise in university-private industry partnerships, outreach, cross-disciplinary teaching, leadership in professional associations, and scholarship on the relationship between the built environment and psychological well-being. It is anticipated that Dr. Johnson would help cultivate industry partnerships and outreach opportunities, as well as co-develop and co-facilitate outreach workshops and courses in utilizing landscape design to promote health people and healthy businesses.

Jessica Morse, MA, graduate student in Counseling Psychology, will serve as Graduate Assistant of CMAP. Ms. Morse will be responsible for providing light administrative assistance with managing the undergraduate classes, developing proposals for the MAPP, and coordinating and recording MAPP meetings.

Organizational Structure Years 4-5

Roles: Director, MAPP Administrator, MAPP Instructor, Faculty Affiliate, Graduate Assistant

Personnel: Michael Steger, Bryan Dik, Bradley Conner, Zachary Johnson, TBD

In years 4-5 and beyond, CMAP will invest substantial time and available resources into the development and successful launch of the MAPP program. Dr. Steger will continue to serve as Director, and additional Faculty Affiliates will be sought to supplement the expertise and efforts of Dik, Conner, and Johnson, particularly from among faculty and staff outside of

Psychology. For optimal functioning, the MAPP program will require a dedicated administrative assistant and at least one dedicated instructor.

Also at this stage of CMAP's development, it is anticipated that an increased number of workshops, classes, and public lectures will be offered to the CSU and Front Range community, as well as a global community seeking to connect with CMAP online or through invited engagements. CMAP will seek to engage graduate student through instructional support and outreach Graduate Assistant positions in years 4-5 and beyond, adding stable, funded opportunities for graduate students.

Budget and Space

CMAP will seek to build its own budgetary resources through the teaching and outreach programs it develops, as well as opportunistically pursuing grant funding, donations, and partnerships with industry. The majority of effort expended toward CMAP programs in the first three years will go toward developing these resources, and will be provided by its Director and Faculty Affiliates without requiring dedicated salary lines. Although no dedicated salary or equipment costs are needed for the center to begin developing coursework, partnerships, and outreach opportunities, three sources of support have been procured totaling approximately \$8,000-\$22,000 per fiscal year:

First, annual support for a 5 hour Graduate Research Assistantship has been allocated by Psychology to Dr. Steger, which will fund the activities of the CMAP Graduate Assistant for the first five years. This support is equivalent to roughly \$4,000 per year.

Second, a revenue-sharing agreement has been developed with Psychology for greater-than-salary tuition revenue generated by Online Introduction to Positive Psychology courses that are scheduled to run every semester beginning Summer 2016. With conservative estimated

enrollments of 10-50 students per fiscal year, revenue would be expected to be \$5000-25,000 annually.

Third, the directors of CSU's proposed Center for Spiritual Wellbeing and Religious Partnership have pledged to provide allocated space, and prioritized access to shared space in the new medical services building. CMAP envisions a strong and mutually beneficial collaboration with this new Center and has committed to providing well-being and resilience workshops and other support services to the target beneficiaries of the new Center. Any additional space or equipment requirements may be satisfied through the resources of the Psychology Department on an ad hoc basis (e.g., using class rooms) or would be necessitated and hence supported through grant-funded research. CMAP does not have extensive needs for space. However, it would be advantageous for CMAP to have outreach-focused space it can use to interface with the public through provision of workshops, classes, special events, and lectures.

The long-term impact of CMAP will be greatly magnified by hosting a MAPP program, both because of revenue and because of the international visibility of such programs and the strong network of alumni such programs produce. Should the MAPP program successfully launch, tuitions and fees will provide a stable input to CMAP to support developing additional programs (i.e., Invited Speakers, Annual Conference) that are themselves expected to be revenue-positive. A range of projected revenue for the MAPP, based on varying tuition/fee levels and enrollment is provided below. These projections are based on the fact that there are only two potential competitor programs in the US (University of Pennsylvania and Claremont Graduate University), that the Pennsylvania program receives 80 or more applications each year and accepts 40, who pay \$60,000 per year for the program:

High Estimate

Year	Number of Students	Per-Student Cost	Total Annual Revenue
1	12	\$27,000	\$324,000
2	17	\$29,000	\$493,000
3	22	\$31,000	\$682,000
4	25	\$33,000	\$825,000
5	25	\$36,000	\$900,000

Low Estimate

Year	Number of Students	Per-Student Cost	Total Annual Revenue
1	8	\$25,000	\$200,000
2	10	\$25,000	\$250,000
3	14	\$25,000	\$350,000
4	17	\$25,000	\$425,000
5	20	\$25,000	\$500,000

Should the MAPP program fail to launch in the 4th year, CMAP will still be able to contribute expertise and provide a sustainable resource for the Front Range community in positive psychological and behavioral functioning to the CSU and Front Range communities through courses and outreach with little to no budgetary outlay, and CMAP will continue to pursue grant funding, donations, and industry partnerships. The key contribution of CMAP, even in the unlikely event that it fails to generate any independent revenue, is to catalyze and build faculty, student, and community interest and expertise in meaning, purpose, and flourishing.

Space:

As noted above, CMAP will not require extensive space or equipment, as its central proposition is premised upon intellectual expertise. CMAP has received a pledge for allocated space and access to shared space in the new medical services center being built at CSU. This space is pursuant to the success of the proposal for CSU's Center for Spiritual Wellbeing and Religious Partnership. Existing space will be sought on an as needed basis. Through Psychology, CMAP would have access to multiple classrooms, meeting rooms, and office space, not to

mention the use of Dr. Steger's CSU office and lab facilities, to host meetings, lectures, and other events. Thus, CMAP will be able to work around the present lack of confirmed dedicated space.

MEMO

TO: Mary Stromberger, Chair, Faculty Council

FROM: Don Samelson, Chair, Committee on Scholarship, Research and Graduate Education

DATE: March 3, 2016

RE: Revisions to the *Graduate and Professional Bulletin* –
Application: U.S. Citizens or Permanent Residents

THE COMMITTEE ON SCHOLARSHIP, RESEARCH AND GRADUATE EDUCATION
MOVE THAT FACULTY COUNCIL ADOPT THE REVISIONS TO SECTION:
“APPLICATION: U. S. CITIZENS OR PERMANENT RESIDENTS OF THE *GRADUATE
AND PROFESSIONAL BULLETIN* TO BE EFFECTIVE UPON FACULTY COUNCIL
ADOPTION EFFECTIVE IMMEDIATELY AS FOLLOWS:

ADDITIONS - UNDERLINED - DELETIONS ~~OVERSCORED~~

APPLICATION: U.S CITIZENS OR PERMANENT RESIDENTS

Students apply online with the Admissions graduate application.

The on-line application will be electronically submitted to the Office of Admissions and then forwarded to the appropriate academic departments. In addition to the on-line application, a \$60 non-refundable application fee must be electronically submitted.

The following must be sent directly to the department in which the applicant plans to study (see Directory of Departmental and Program Contact Persons for proper address).

1. One official transcript of all collegiate work completed (2) post-high school. Additionally separate transcripts are not required for study abroad credits if the GPA and credits are recorded on the transcript of the university that sponsored the study abroad experience. CSU transcripts are not required. Training course transcripts from branches of the U.S. military that show credit received with neither grades nor degrees awarded are exempt from the transcript requirement.
2. Three letters of recommendation must be sent to the academic department to which you are applying. There is no standardized format unless specified by your department.

3. Any other information that individual departments may require of applicants to particular programs. Applicants are advised to contact the departments regarding additional application materials such as the GRE or GMAT.
4. Regardless of citizenship, applicants may be required to demonstrate proof of English language proficiency, if they do not have a degree from an institution where the primary language of instruction is English.

General deadlines for the receipt of complete applications are as follows: Fall Semester, April 1; Spring Semester, September 1; Summer Term, January 1. Please submit the on-line application and all supporting documents by the appropriate date. Note that individual departments may have earlier deadlines for certain programs. Please consult appropriate sections of this Bulletin or a department contact person. Applications completed later than these published deadlines may be considered depending on space and resources available. Late applications that cannot be considered will be updated by the Office of Admissions to a later semester or term. Except for Integrated Degree Program (IDP) Admissions, applications cannot be accepted more than fifteen months in advance of the term in which study is to begin.

Students who wish to be considered for fellowships, assistantships, or other forms of merit- or competency-based financial support may be subject to earlier deadlines. See Application for Financial Support.

The application fee is not refundable even if the application is withdrawn or admission denied, nor is it applied to tuition and fees if the applicant subsequently enrolls. The non-refundable application fee is \$50 and must be received by the Office of Admissions. Your application cannot be submitted until the fee is received.

Rationale:

Removing the application dollar amount simplifies having to update in multiple places any time the fee changes (this change was submitted and approved by CoSRGE on Feb. 2016 and is currently pending FC approval).

Collegiate work completed prior to high school is superfluous to the admission process at the graduate level. Admission committees do not review this information per data gathered from representation from all colleges via the Slate Steering Committee and the Slate Working Group. Additionally, it is time consuming for the student to gather these transcripts and delays the review of the application. We are trying to expedite the review process for admission since less time for review frequently increases the acceptance rate.

It is time consuming and often impossible for students to access official transcripts from a study abroad experience. When the information is included on the "home university" transcript, it is redundant to require the official transcripts. Again, we are trying to expedite the review process for admission since less time for review frequently increases the acceptance rate.

MEMO

TO: Mary Stromberger, Chair, Faculty Council

FROM: Don Samelson, Chair, Committee on Scholarship, Research and Graduate Education

DATE: April 7, 2016

RE: Revisions to the *Graduate and Professional Bulletin* –
EVALUATION OF GRADUATE STUDENTS AND GRADUATE SCHOOL APPEALS PROCEDURE

THE COMMITTEE ON SCHOLARSHIP, RESEARCH AND GRADUATE EDUCATION MOVE THAT FACULTY COUNCIL ADOPT THE REVISIONS TO SECTION: “*EVALUATION OF GRADUATE STUDENTS AND GRADUATE SCHOOL APPEALS PROCEDURE*” – OF THE *GRADUATE AND PROFESSIONAL BULLETIN* TO BE EFFECTIVE UPON FACULTY COUNCIL ADOPTION EFFECTIVE IMMEDIATELY AS FOLLOWS:

ADDITIONS - UNDERLINED - DELETIONS ~~OVERSCORED~~

EVALUATION OF GRADUATE STUDENTS

Graduate students are students, apprentices to the professions, and, when they hold an assistantship or other paid position, employees. Each of these roles has its own rights and responsibilities. Graduate students are responsible for knowing any special expectations and requirements of their department and program. They are expected to remain in good academic standing by making satisfactory progress toward the degree (see Scholastic Standards) and must at all times have an advisor. In the event that an advisor resigns ~~that responsibility~~, the department head will appoint a new advisor from that position, it is the student's responsibility to obtain a replacement. ~~Department codes shall specify how advisors are appointed.~~

Rationale: This content was not updated according to policy in “The Advisory System”. This language makes the content consistent with departmental practices and language in “The Advisory System”.

MEMORANDUM

DATE: April 9, 2016

TO: Mary Stromberger
Chair of Faculty Council

FROM: Don Estep, Chair
Committee of Faculty Governance

SUBJECT: Proposed revision to Sections C2.8 and E4.2 of the *ACADEMIC FACULTY AND ADMINISTRATIVE PROFESSIONAL MANUAL*

The Committee on Faculty Governance submits the following amendment:

MOVED, THAT SECTIONS C2.2.3, C2.8 AND E4.2 OF THE MANUAL BE AMENDED AS FOLLOWS:

Additions are underlined, and deletions are indicated by ~~strikeouts~~.

C.2.3.3 Special Academic Units (~~new section added May 3, 2011~~)

Special Academic Units, each organized under their respective Director(s), have general charge over their respective degree programs. A Special Academic Unit cannot serve as the academic unit in which a tenure track/tenured faculty member has his or her appointment. The faculty members in a Special Academic Unit must come from more than one (1) department. A Special Academic Unit may hire temporary, special and senior-teaching faculty.

C.2.8 Creation and Organization of Special Academic Units (~~new section added May 3, 2011~~)

C.2.8.1 Creation of a Special Academic Unit

Initial approval for the creation of a Special Academic Unit shall follow the procedures in Section C.2.2. The proposal for the creation of a Special Academic Unit shall include all of the following:

- a. It shall specify the name and the mission. The name shall not include the terms “department” or “college,” but, in some cases, it may be appropriate for the name to include the term “school.”
- b. It shall specify the proposed Director(s).
- c. It shall include a proposed code, as described in Section C.2.8.3.
- d. It shall specify a group of participating tenure track/tenured faculty members from more than one (1) department (see Section C.2.3.3).

- e. For each department participating in the Special Academic Unit, there shall be a written document signed by the proposed Director(s) of the Special Academic Unit, the department head, and the college dean detailing the expected commitments of the department to the Special Academic Unit.
- f. For each college participating in the Special Academic Unit, there shall be a written document signed by the proposed Director(s) of the Special Academic Unit and the college dean detailing the expected commitments of the college to the Special Academic Unit.
- g. For each participating tenure track/tenured faculty member who is listed as helping to deliver the courses and/or programs of the Special Academic Unit, there shall be a written document signed by the proposed Director(s) of the Special Academic Unit, the faculty member, the head of the faculty member's home department, and the dean of faculty member's college detailing the expected commitments to the Special Academic Unit, the duration of these commitments, and how these expectations shall be factored into performance evaluations within the home department.
- h. It shall identify the organizational units and faculty expertise which are critical to the success of the Special Academic Unit and identify their critical roles.
- i. It shall present a budget for the Special Academic Unit that details sources and financial commitments and it shall demonstrate the existence of sufficient financial and other resources to carry out all activities associated with the Special Academic Unit operations and programs housing and offering the courses and/or programs of study.
- j. It shall present a plan for required Library resources.

C.2.8.2 Housing of Courses and Programs of Study

Proposals by Special Academic Units to house courses and/or programs of study shall follow the same curriculum procedures as for departments (as closely as possible), including approval by Faculty Council. Any deviations from these procedures to fit the distinctive characteristics of a Special Academic Unit must be approved by the University Curriculum Committee and Faculty Council. New degrees and majors require the approval of the Board and the Colorado Commission on Higher Education.

C.2.8.3 Code of a Special Academic Unit

A Special Academic Unit shall operate under a code that includes all of the following:

- a. The code shall specify the departments and other organizational units that will participate in the operation of the Special Academic Unit.
- b. The code shall specify the next higher level of administrative oversight.
 - 1. If all of the participating tenure track/tenured faculty members are from the same college, then the dean of that college shall provide the administrative oversight, and the Director(s) shall report to this dean.
 - 2. If the participating tenure track/tenured faculty members are from more than one (1) college, then the administrative oversight may consist of a single dean or an Administrative Oversight Committee that includes multiple deans (or their designees). Typically, the number of deans should be large enough that at least eighty (80) percent of the participating tenure track/tenured faculty members are in the colleges of these deans. The choice of which deans are included should be re-evaluated as the distribution of the participating tenure track/tenured faculty members among the colleges changes with time.

3. An Administrative Oversight Committee containing two (2) or more deans (or their designees) shall also include the Vice Provost for Undergraduate Affairs, if the Special Academic Unit houses undergraduate courses and/or programs of study, and the Dean of the Graduate School, if the Special Academic Unit houses graduate courses and/or programs of study.
4. The code shall specify whether the members of the Administrative Oversight Committee have equal or unequal voting rights (and the basis for the determination of voting rights).
5. If the Administrative Oversight Committee includes only the Vice Provost for Undergraduate Affairs, then the Director(s) shall report to that vice provost. If the Administrative Oversight Committee contains both the Vice Provost for Undergraduate Affairs and the Dean of the Graduate School, then the code shall specify to which the Director(s) reports.
6. The code shall specify the duties and responsibilities of the Director of the Special Academic Unit. The dean or vice provost to whom the Director(s) reports shall choose future Director(s). The code shall specify the process for the selection of future a Directors. The code shall specify the process for initiating a change of Director.
7. The dean or vice provost to whom the Director(s) reports shall have oversight of the budget account(s) for the Special Academic Unit.
- c. The code shall specify the role of the participating departments and other organizational units in the selection of the Director(s).
- d. The code shall specify how departments and other organizational units are added to and removed from the list of participants.
- e. The code shall specify how faculty members are added to and removed from the list of participating faculty members.
- f. The code shall specify that a minimum of one (1) faculty meeting shall be held each semester of the academic year, as well as how additional faculty meetings may be called and how far in advance written notice must be given by the Director(s) for faculty meetings.
- g. The code shall specify the voting rights of ~~the~~ all participating tenure track/tenured, temporary, special, and senior-teaching faculty members with respect to decisions regarding the governance of the Special Academic Unit.
- h. The code shall specify the timeline for conducting self-evaluations and accompanying reviews of the code at least one each five (5) years.
- i. The code shall specify the procedures and responsibilities concerning temporary, special, and senior-teaching faculty hired by the Special Academic Unit including, but not limited to, performance evaluations, promotion criteria, reappointment procedures, salary exercises, and the administrative line of responsibility for temporary, special, and senior-teaching faculty appointments.
- i.j. The code shall specify the procedures for amending the code. These procedures shall require approval by a two-thirds (2/3) majority of the faculty members eligible to vote for changes to the code.
- j.k. The Special Academic Unit shall have a procedures manual, and the code shall specify the process for amending this procedures manual.

~~k. l.~~ The code shall specify the process for the formation of ~~an~~ Academic Committee(s) to oversee curricular matters, including the process for the selection of the members of ~~this the~~ committee(s). The membership of ~~this the~~ committee(s) shall provide appropriate representation of the departments and other organizational units participating in the Special Academic Unit.

~~l. m.~~ The code shall specify the procedures and processes by which curricular proposals from the Academic Committee reach the University Curriculum Committee.

1. If the administrative oversight is provided by only one (1) dean, then curricular proposals from the Academic Committee shall be sent for review to that college's curriculum committee and then to the University Curriculum Committee.

2. If the administrative oversight is provided by an Administrative Oversight Committee, then curricular proposals from the Academic Committee shall be sent for review to each of the college curriculum committees for the colleges having deans (or their designees) on the Administrative Oversight Committee. Any one of these college curriculum committees may forward the proposal, together with the results of the reviews from all participating college curriculum committees, to the University Curriculum Committee.

3. If the number of college curriculum committees involved makes it advisable, the code may include the formation of a Liaison. Committee whose members serve as liaisons to their respective college curriculum committees with regard to curricular proposals coming from the Academic Committee.

~~m. n.~~ If the Special Academic Unit houses undergraduate programs of study, the code shall include a description of the appointment of academic advisors.

~~n. o.~~ If the Special Academic Unit houses graduate programs of study, the code shall include a description of the appointment of graduate advisory committees for graduate students.

~~o. p.~~ If the Special Academic Unit houses courses, the code shall specify the procedures by which students may appeal academic decisions of their instructors. These procedures shall comply with guidelines approve by Faculty Council (see Section I.7).

E.4.2 Selection of Faculty (~~last revised June 22, 2006~~)

a. Selection of tenure track and tenured faculty members is a responsibility of individual departments, but must be made within the spirit and intent of University policy. Specific hiring procedures employed within the department shall be included in the departmental code. Confidentiality during the hiring process must be maintained to the extent required by law. However, all members of the search committee, as well as other personnel involved in employment recommendations, shall have access to the complete information contained in all applicants' files. Recommendations at each level (department, department head, and dean) shall be reversed at higher levels only for compelling reasons that shall be stated in writing to each of the recommending bodies.

b. Selection of temporary, special, and senior-teaching faculty members is a responsibility of individual departments or Special Academic Units, but must be made within the spirit and intent of University policy including sections E.2.1.3, E.2.1.4, and E.2.1.5 of the Manual which describe these appointment types. Specific hiring procedures employed within the department/Special Academic Unit shall be included in the departmental/Special Academic Unit code. Confidentiality during the hiring process must be maintained to the extent required by law. However, all members of the search committee, as well as

other personnel involved in employment recommendations, shall have access to the complete information contained in all applicants' files. Recommendations at each level (department/Special Academic Unit, department head/Special Academic Unit director, and dean(s)) shall be reversed at higher levels only for compelling reasons that shall be stated in writing to each of the recommending bodies.

Rationale:

During 2015, the Committee on Faculty Governance conducted a survey on Manual language related to Special Academic Units (SAUs) as requested by the Chair of Faculty Council. The results of the Survey have been widely distributed to all stakeholders. The survey revealed a number of issues with current practices regarding the establishment and operation of SAUs. Some of these issues are related to language about SAUs in the Manual. The suggested changes address these issues.

MEMORANDUM

DATE: April 15, 2016

TO: Mary Stromberger
Chair of Faculty Council

FROM: Katie Brayden, Chair
Administrative Professional Council

SUBJECT: Proposed revision to the Preface of the *ACADEMIC FACULTY AND ADMINISTRATIVE PROFESSIONAL MANUAL*

The Administrative Professional Council MOVES THAT THE PREFACE TO THE *ACADEMIC FACULTY AND ADMINISTRATIVE PROFESSIONAL MANUAL*, FIFTH PARAGRAPH, BE AMENDED AS FOLLOWS:

Additions are underlined, and deletions are indicated by ~~strikeouts~~.

Unless a proposed change or addition to this Manual is necessitated by action of the Board or the Colorado General Assembly, it must be approved by the Faculty Council prior to submission to the Board in accordance with the procedure in Section C.2.2.e of this Manual. Proposed changes or additions to Manual sections that apply to administrative professionals ~~shall be submitted to the Chair of the Administrative Professional Council for the purpose of giving the Administrative Professional Council a chance for review and feedback~~ are subject to the approval of the Administrative Professional Council prior to action by Faculty Council.

Rationale:

The Manual is a codification of important policies, privileges and benefits, and helpful information that governs and serves the interests of both faculty and administrative professionals at CSU. As a shared resource, the Manual should fully reflect and further the principle of shared governance between these two groups. Sections of the Manual that affect the rights, privileges, and interests of administrative professionals should have the full support and approval of the representative body for these members. The Administrative Professional Council should be afforded the role and responsibility of approving new provisions and changes to those sections that impact APs.

MEMORANDUM

DATE: April 20, 2016

TO: Mary Stromberger
Chair of Faculty Council

FROM: Bill Hanneman, Chair
Committee on Responsibilities and Standing of Academic Faculty

SUBJECT: Proposed revision to Section F.3.16 Parental Leave and Catastrophic Circumstances Leave of the *ACADEMIC FACULTY AND ADMINISTRATIVE PROFESSIONAL MANUAL*

The Committee on Responsibilities and Standing of Academic Faculty MOVES THAT SECTION F.3.16 OF THE *ACADEMIC FACULTY AND ADMINISTRATIVE PROFESSIONAL MANUAL* BE AMENDED AS FOLLOWS:

Additions are underlined, and deletions are indicated by strikeouts.

F.3.16 Parental Leave and Catastrophic Circumstances Leave ~~(This leave effective May 23, 2013)~~
(last revised August 7, 2015)

Academic Faculty, Administrative Professionals, Post-Doctoral Fellows, Veterinary Interns and Clinical Psychology Interns with an appointment of at least half-time (50%) or greater ~~who satisfy the eligibility requirements for Short Term Disability (STD)~~ are eligible for Parental Leave ~~(see the Academic Faculty and Administrative Professional Benefits and Privileges Handbook)~~. An employee who is not in a regular, paid employment status ~~(for example, during a sabbatical or other such absence) or 9-month employees during summer session appointments~~ is not eligible for this leave.

An employee becomes eligible for Parental Leave upon becoming a parent or legal guardian of a child. Parental Leave is not available during the period preceding the birth or placement for adoption, even if absences are due to the expected arrival. Foster care placement is not included; however, foster care as part of adoption is included. Employees may use other types of accrued leave (such as Sick Leave or Annual ~~Leave~~), as applicable, for absences during such periods. Only one Parental Leave benefit per employee is available per birth or adoption. The number of children born or adopted (e.g., twins) does not increase the amount of the Parental Leave benefit. ~~{If both Parents are employees, each is entitled to use his or her Parental Leave benefit for the same event}.~~

Parental Leave consists of 3 work weeks of paid time off, in addition to the employee's accrued Sick Leave and Annual Leave (and any Short Term Disability (STD) benefits to which the birth mother is entitled), to be used for the purpose of a new parent to caring care for and bonding bond with the child. Parental Leave may be taken anytime within the first year after delivery/placement or adoption, and it runs concurrently with (is considered part of) Family Medical Leave (FML) if the employee has remaining FML entitlement available for the birth or placement for adoption event. Once commenced, Parental Leave must be used in a continuous block (not split into intermittent days off).

Family Medical Leave (FML) provides job protection for an employee for up to 12 weeks of leave for qualifying events (see Faculty and Administrative Professional Manual Appendix 3 for details on FML). It can be combined with use of Sick and/or Annual leave, as appropriate, to provide income replacement for the FML leave period (up to 12 weeks). A combination of Sick Leave, Annual Leave, STD, and 3 weeks of Parental Leave may provide income replacement during FML. If a birth mother does not have sufficient accrued Sick Leave and Annual Leave to cover the STD elimination (waiting) period, Special Leave will be granted with pay. For a non-birth parent, STD does not apply.

This policy is intended to ensure adequate time off for employees who become new parents, and to provide, with a newborn or newly adopted child, in most circumstances, while providing compensation for at least 9 weeks of the birth mother's 12-week FML period (typically 6 weeks of STD eligibility plus a combination of Sick Leave, Annual Leave, STD, and 3 weeks of Parental Leave), or 3 weeks for the non-birth parent. For adoptive parents, an employee who is the primary caregiver is also eligible for 12 weeks of FML and a minimum of 9 weeks of paid leave, typically a combination of Parental Leave, Sick Leave, and Annual Leave. If Sick Leave and Annual Leave are not sufficient to cover 6 weeks of leave, Special Leave will be granted with pay. As used herein, "primary caregiver" means the one parent who has primary responsibility for the care of a child immediately following the coming of the child into the custody, care and control of the parent for the first time. If the employee is eligible for STD, Parental Leave shall not commence until after STD benefits are exhausted. A non-birth parent or an adoptive parent who is not the primary caregiver is eligible for 3 weeks of Parental Leave and any accrued Sick Leave and Annual Leave.

Parental Leave is not intended to be used to fulfill the STD elimination period of 10 continuous working days of absence. Once taken, Parental Leave must be used in a contiguous block (not split into intermittent days off).

Prior notice of the intent to take Parental Leave is required at least 30 days in advance (unless such notice is impossible impractical, in which case, as soon far in advance as possible). Your The employee's supervisor is responsible for timely reporting of Parental Leave, within one month following the return to work date, in accordance with the Leave Reporting Policy in the Human Resources Manual, in order to receive funding from the fringe pool. Illustrative

examples of Parental Leave are located in Section 2 of the Human Resources Manual at <http://www.hrs.colostate.edu>.

~~Note: The Parental Leave Policy may be reviewed at policies.colostate.edu.~~

Rationale: These changes expand the current Parental Leave benefit and incorporate changes in policy negotiated with the federal government. None of the current Parental Leave benefits have been eliminated. The reference to Catastrophic Leave in the title is removed, since this is now Section F.3.17.

MEMORANDUM

DATE: April 20, 2016

TO: Mary Stromberger
Chair of Faculty Council

FROM: Bill Hanneman, Chair
Committee on Responsibilities and Standing of Academic Faculty

SUBJECT: Proposed revision to Section F.3.17 Catastrophic Circumstances Leave of the
ACADEMIC FACULTY AND ADMINISTRATIVE PROFESSIONAL MANUAL

The Committee on Responsibilities and Standing of Academic Faculty MOVES THAT SECTION F.3.17 OF THE *ACADEMIC FACULTY AND ADMINISTRATIVE PROFESSIONAL MANUAL* BE AMENDED AS FOLLOWS:

Additions are underlined, and deletions are indicated by strikeouts.

F.3.17 Catastrophic Circumstances Leave (last revised ~~August 7, 2015~~)

Eligible Employee: Academic Faculty, Administrative Professionals, Post-Doctoral Fellows, Veterinary Interns and Clinical Psychology Interns with an appointment of at least half-time (50%) or greater who are benefits eligible. An employee is not an Eligible Employee during any period in which the employee is not in paid employment status.

Catastrophic Circumstances: An extraordinary, disastrous event or situation that was not reasonably foreseeable, or that resulted from serious illness, and that caused the employee to be unable to work for a period of at least 2 weeks.

Unit Head: The Department Head, Dean, Director, Vice President, or other administrator responsible for making determinations concerning an employee's leave.

The Catastrophic Circumstances Leave may be applicable in extraordinary circumstances where an employee has exhausted all available sick and annual leave and suffers an unforeseen event, such as a catastrophic natural disaster or casualty that displaces the employee from his or her home. As well, the Catastrophic Circumstances Leave may be applicable in the case of a serious illness of the employee or employee's immediate family member for which no other accrued leave is available, or similar event. When Catastrophic Circumstances are found to exist, and an Eligible Employee has exhausted all available paid leave, A department or unit head a Unit Head

may authorize up to two work weeks of paid or unpaid time off, in the Unit Head's discretion. In the rare case that an employee who is eligible for short term disability (STD) benefits ~~STD~~ does not have enough paid leave to cover the 10-day STD waiting elimination (waiting) period, such paid leave must be granted for the unpaid portion; all other cases are within the discretion of the ~~department head~~ Unit Head. See the Academic Faculty and Administrative Professional Privileges and Benefits Summary for details on short term disability coverage.

~~Any leave granted under this policy must be designated as FML Family Medical Leave (FML), as applicable in accordance with federal regulations. This policy is not intended to change or conflict with section F.3.14, Special Leave.~~

1. Determination of Catastrophic Circumstances

The Catastrophic Circumstances in which leave may be granted under this policy are limited to those in which the Eligible Employee, or the employee's immediate family member (as defined in the Family Medical Leave (FML) policy, Academic Faculty and Administrative Professional Manual, Appendix 3) who lives with the employee or for whom the employee is responsible to provide care, is so severely affected by the catastrophe that the employee cannot reasonably return to work for at least two 2 weeks. Examples of eligible scenarios include:

- a. A natural disaster that substantially damages or destroys the employee's primary residence or displaces him or her from the home;
- b. A severe injury or illness, as certified by a healthcare provider, that results in the inability of the employee to work.

2. Exhaustion of Other Leave

Before a request for Catastrophic Circumstances Leave may be granted, the Eligible Employee's Unit Head must determine that the employee has exhausted or is ineligible for all other paid leave benefits, including, but not limited to, sick leave, annual leave, and short- and long-term disability.

3. Maximum Period of Leave

Leave granted under this policy cannot exceed two work weeks and must be taken contiguously, and runs concurrently with FML if applicable. Leave is not prorated beyond the two weeks for employees who are half-time, but not full-time. Leave may be granted only for so long as the Catastrophic Circumstances continue to exist.

4. Effect on Other Leave

- a. Leave without Pay (LWOP): An employee who is granted Catastrophic Circumstances Leave and remains unable to return to work after such leave is exhausted may be eligible for Leave without Pay, as provided in the Human Resources Manual, Section 2 and the Academic Faculty and Administrative Professional Manual, Section F.3.13.

b. Family Medical Leave (FML): Leave granted under this policy must be designated as FML if the reason for the leave qualifies as FML and the employee is eligible under the FML policy. Catastrophic Circumstances Leave must run contiguously with FML, when applicable. Departments are responsible for reporting FML when it applies.

c. Human Resources can assist unit administrators with Catastrophic Circumstances Leave due to an illness or injury that qualifies for the use of FML, and short or long-term disability.

Rationale: These changes expand the current Catastrophic Leave benefit. None of the current benefits have been eliminated. Clear definitions of terms have also been added, as well as some clarification of the policy.

Date: April 21, 2016

To: Mary Stromberger, Chair of Faculty Council

From: William Hanneman, Chair
Committee on Responsibilities and Standing of Academic Faculty

Subject: Proposed revision to Section E.9 of the *Manual*

The Committee on Responsibilities and Standing of Academic Faculty
MOVES, THAT Section E.9 OF THE *ACADEMIC FACULTY AND*
ADMINISTRATIVE PROFESSIONAL MANUAL BE REVISED AS
FOLLOWS:

Please note the language: additions underlined, deletions ~~overseored~~.

E. 9 Faculty Productivity (~~last revised February 14, 2014~~)

Decisions concerning tenure, promotion, and merit salary increases are linked to the faculty member's productivity in teaching and advising, research and other creative activity, and University and professional service. Merit salary increases may also take into consideration positive behaviors that benefit the academic unit, as well as negative behaviors that resulted in disciplinary action, through the E.15 process, including a letter of reprimand. Each academic unit must establish expected levels of productivity for the unit in each of these areas. Productivity is assessed by relating the effort expended to the outcome, in terms of effectiveness, impact, and documentation of the activity. Effort distribution is the allocation of effort into particular areas of responsibilities. Workload describes the professional responsibilities of the faculty. The responsibilities of faculty members for each of these activities will vary, depending upon the mission and needs of the academic unit and the expertise and interests of the faculty. The University recognizes that a faculty member's activities may change over a career and is committed to the use of differentiated responsibilities for individual faculty. Hence, in the evaluation process, reasonable flexibility should be exercised, balancing, as the case requires, heavier responsibilities in one (1) area against lighter responsibilities in another.

Decisions regarding tenure, promotion, and merit salary increases based on productivity must be consistent with, and based upon, the effort distribution established for each faculty member. The department code shall define the general expectations of effort distribution regarding teaching and advising, research and other creative activity, and service responsibilities in terms of the academic mission of the department. Where appropriate and consistent with the academic mission of the department, the department code should define outreach/engagement expectations and how those expectations are addressed in the faculty member's teaching, research, and/or service effort distribution. During the probationary period and following tenure in the years leading to full professor, there may be a need for changes in the workload and effort distribution originally established at the time of hiring or at the time of tenure and promotion to associate professor. These changes shall be negotiated between the faculty member and the department head (E.9.1, E.9.2). In this event,

since promotion and tenure decisions are linked to the faculty member's productivity in line with effort distribution and workload, the promotion and tenure committee or a subcommittee thereof shall provide input in writing to the department head regarding the extent to which these changes may affect progress toward tenure. Following any negotiated changes, these changes and the committee's response, shall be clearly articulated in writing by the department head to the faculty member.

Rationale

The Manual clearly delineates separate processes for evaluating faculty performance and for addressing negative behaviors. This protects individual faculty from having their performance evaluation affected by non-performance factors (such as behavior). Instead, serious behavioral issues¹ are address separately, through the Disciplinary Action/E.15 process. Disciplinary actions include one action that does not require a Hearing (letter of reprimand), but all other disciplinary actions require a Hearing and are viewed as "nuclear" actions – reassignment of duties, suspension without pay, reduction in pay, loss of tenure, or termination – and therefore are rarely pursued.

While faculty should be protected from having serious behavioral issues affect their performance evaluation, a balance is needed to include additional, non-nuclear options for addressing behavior. Section E.9 currently states that merit salary increases are "linked" to faculty productivity, but is vague on other factors that can be considered. The proposed revision makes it clear that decisions regarding merit salary increases can take into consideration both productivity **and** behavior (both positive and negative). For negative behavior to impact merit salary increases, the behavior must be serious enough to trigger Disciplinary Action through the E.15 process, including a letter of reprimand. This revision will provide a new option to manage serious, negative behaviors without necessarily resorting to the formal Hearing process in E.15.

¹Defined in E.15 as "b. Behavior of the Tenured Faculty Member that (1) presents significant risk to the safety or security of members of the University community (e.g., violence) and/or (2) represents a serious violation of ethics (see Section D.9) and/or University policy (including, but not limited to, unlawful discrimination, research misconduct, harassment, retaliation, or misappropriation of funds)".