

***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, March 1, 2016 – 4:00 p.m. – A202 Clark Building**

#### **I. Faculty Council Agenda – March 1, 2016 – A202 Clark Building – 4:00 p.m.**

##### **A. ANNOUNCEMENTS**

1. Next Faculty Council Meeting – April 5, 2016 – A202 Clark Building - 4 p.m
2. Executive Committee Meeting Minutes located on FC website – November 10 and 17, 2015; December 8 and December 15, 2015; January 19 and 26, 2016; February 9, 2016  
(<http://facultycouncil.colostate.edu/faculty-council-meeting-dates-agenda-minutes/>)
3. Revision to the 2014 – 2016 Academic Calendar – Acting for Faculty Council – Adopted by Executive Committee December 15, 2015
4. Adoption of the Hospital Provider Fee Letter – Acting for Faculty Council – Adopted by Executive Committee – February 9, 2016 (p. 1)
5. Location of issues – Tracking list (p. 2)
6. Monday, March 21, 2016, 12:00 – 1:00 p.m. Meena Balgopal, CSU Biology, Erica Suchman, CSU MIP: “Evaluating Teaching Effectiveness”
7. Re-Envision CSU. What’s your vision for CSU? Please share your vision through the Re-Envision CSU website at <http://source.colostate.edu/re-envision-csu/>. For more information on this initiative, please see the following Source article:  
<http://source.colostate.edu/re-envision-colorado-state-charts-course-future/>.

8. Game-Day Parking and Transportation Logistics – The preliminary parking and transportation plan for game day operations is available on the stadium “Game Day” Website at <http://stadium.colostate.edu/gameday>. Feedback and comments can be submitted through this website as well. A campus forum will be held later this spring (TBD).

**B. MINUTES TO BE APPROVED**

1. Faculty Council Meeting Minutes – December 1, 2015 (pp. 3-18)

**C. UNFINISHED BUSINESS**

1. Faculty Council Standing Committee Graduate Student Election (p. 19)

**D. REPORTS TO BE RECEIVED**

1. President – Tony Frank
2. Provost/Executive Vice President – Rick Miranda
3. Faculty Council Chair – Mary Stromberger
4. Board of Governors Faculty Representative – Paul Doherty, Jr.
5. UGO Annual Report (pp. 20-22)

**E. CONSENT AGENDA**

1. UCC Minutes – November 6, 13 and 20, 2015; December 4, 2015 (*revised January 15, 2016*) and December 11, 2015; January 15, 22 and 29, 2016; February 5, 12 and 19, 2016 (pp. 23-141)
2. Approval of Degree Candidates – Spring and Summer Semesters (p. 142)

**F. ACTION ITEMS**

1. Election – Faculty Council Chair – Committee on Faculty Governance – Mary Stromberger Nominated (p. 143)
2. Election – Faculty Council Vice Chair – Committee on Faculty Governance – Stephanie Clemons Nominated (p. 144)

3. Election – Faculty Council Board of Governors Faculty Representative – Committee on Faculty Governance - Paul F. Doherty Nominated (p. 145)
4. Proposed revisions to Section E.2.1.5 Temporary Appointments – *Academic Faculty and Administrative Professional Manual* - CoNTTF (pp. 146-147)
5. Biennial Reviews of CIOsUs – CUP (pp. 148-157)

**G. DISCUSSION**

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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.

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DATE: February 10, 2016

Office of Faculty Council  
1001 Campus Delivery  
Fort Collins, CO 80523-1170

TO: The Honorable John Hickenlooper, Governor of Colorado

CC: Dr. Tony Frank, President, Colorado State University  
John Kefalas, Senator, Colorado Senate  
Jeni Arndt, Representative, Colorado House of Representatives  
Millie Hamner, Representative, and Chair, Joint Budget Committee

FROM: Mary Stromberger, Chair, Colorado State University Faculty Council

RE: Colorado State University Faculty Council supports reclassification of Hospital Provider Fee to an Enterprise Fund

Dear Governor Hickenlooper:

Colorado State University is home to 1,700 faculty, who are represented by the Faculty Council. It is the responsibility of Faculty Council to develop and maintain the academic policies and programs of Colorado State University. Historically, the Council has avoided involvement in State political issues, but our concern for the proposed budget cuts to higher education has grown to the level that we feel we must act. Therefore, the Council has voted to send this letter of support for changing the Hospital Provider Fee to an Enterprise Fund.

We must do everything constitutionally possible to financially protect and promote higher education in Colorado. While reclassification of the Hospital Provider Fee does not solve the larger issue of the TABOR limit, it will alleviate some of the projected budget shortcomings, and would protect the State's investment in students and employees of Colorado State University and elsewhere. Otherwise, a reduction in higher education support will jeopardize CSU's ability to fulfill its mission of access to education, research and discovery, and service to Colorado citizens and beyond.

The Faculty Council joins the Colorado Commission on Higher Education, the Board of Governors of the Colorado State University System, the Colorado State University Classified Personnel Council, the Colorado State Administrative Professional Council, and the Associated Students of Colorado State University in supporting the reclassification of the Hospital Provider Fee to an Enterprise Fund.

Sincerely,

A handwritten signature in cursive script, reading "Mary Stromberger".

Mary E. Stromberger  
Chair, Faculty Council



**Faculty Council Standing Committees Tracking List**  
**Updated March 2016**

Faculty Governance, chair Don Estep – elections; P&T committee composition; SAU's

Intercollegiate Athletics, chair Todd Donovan – report on student athlete safety

Libraries, chair Jerry Magloughlin – journal subscription recommendation, research data policy

Non-Tenure Track Faculty, chair Jen Aberle – NTTF career pathways

Responsibilities and Standing of Academic Faculty, chair Bill Hanneman – parental leave policy, recognition and evaluation of service, research data policy

Scholarship, Research, and Graduate Education, chair Don Samelson – professional doctorate degrees, research data policy

Scholastic Standards, chair Liba Goldstein – freshman fresh start policy, grade appeal policy

Strategic and Financial Planning, chair Katharine Leigh – Phase I and II program proposals; professional doctorate degrees

Teaching and Learning, chair Anton Betten – course survey recommendations; evaluating teaching effectiveness; academic integrity and academic misconduct policy revision (1.5)

University Curriculum Committee, chair Carole Makela – review student recommendations for diversity courses, other special actions as needed

University Programs, chair Eric Prince – review of CIOSU's (completed)

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, December 1, 2015 – 4:00 p.m. – A201 Clark Building**

**CALL TO ORDER**

The Faculty Council meeting was called to order at 4:02 p.m. by Mary Stromberger, Chair.

**ANNOUNCEMENTS**

1. Next Faculty Council Meeting – February 2, 2016 – A202 Clark Building – 4 p.m.

Stromberger announced that the next Faculty Council meeting would be held on February 2, 2016 at 4:00 p.m. in Room A202 Clark Building and noted the new room number for the spring semester.

2. Executive Committee Meeting Minutes located on FC website – October 20 and 27, 2015  
<http://facultycouncil.colostate.edu/faculty-council-meeting-dates-agendas-minutes/>

Stromberger announced that the Minutes from the October 20 and 27, 2015 Executive Committee meeting have been posted on the Faculty Council website.

**MINUTES TO BE APPROVED**

1. Faculty Council Meeting Minutes – November 3, 2015

Pedros-Gascon, Department of Languages, Literatures and Cultures, noted two mistakes in the minutes, where his department was identified by its former name.

By unanimous consent, the amended minutes of the November 3, 2015 Faculty Council meeting were approved. The minutes will be placed on the FC website.

**UNFINISHED BUSINESS**

Elections – Faculty – Faculty Council Standing Committees – CoFG

### BALLOT

#### Academic Faculty Nominations to Faculty Council Standing Committees

##### Committee on Strategic and Financial Planning

<u>GREGORY PERRY</u>	<b>Agricultural Sciences</b>	<b>2018</b>
(Nominated by Committee on Faculty Governance)		

<u>ROBERT KELLER</u>	<b>Liberal Arts</b>	<b>2018</b>
(Nominated by Committee on Faculty Governance)		

##### Committee on Responsibilities and Standing of Academic Faculty

<u>DAN TURK</u>	<b>Business</b>	<b>2018</b>
(Nominated by Committee on Faculty Governance)		

Don Estep, Committee on Faculty Governance, nominated Gregory Perry (Agricultural Sciences) for CoSFP; Robert Keller (Liberal Arts) for CoSFP; and Dan Turk (Business) for CoRSAF.

Stromberger asked if there were any nominations from the floor. Hearing none, Stromberger declared the nominations closed.

Perry, Keller, and Turk were unanimously elected to three-year terms for each respective committee, effective immediately.

### REPORTS TO BE RECEIVED

1. Provost/Executive Vice President – Rick Miranda

Miranda reported on the following:

The December Board of Governors meeting will be held next week. The next draft of the FY17 budget, which Miranda will present to Faculty Council during the discussion session, will be presented to the Board.

The salary equity exercises were finished last week for both men and women full professors. There will be some salary adjustments as a result of the exercise. One time funds will be used this year and it will be put into the base budget for next year. Announcements will come out next week. Each faculty member whose records were under review will receive an individual communication regarding their potential salary adjustment. Adjustments were made on analysis re: peers and department. Evidence of productivity was also used – similar to what are used with the promotion review exercise.

Antonio Pedros-Gascon (Languages, Literatures and Cultures) asked if the analysis took into consideration the salaries at peer institutions?

Miranda: No, the analysis looked only within each unit at CSU. This was an exercise that was about internal equity.

Miranda gave an update on the Colorado Open Records Act (CORA) requests from the Coloradoan. We are all state employees; therefore our salaries are public. You can go online to obtain some salary information. CSU has been asked by the Coloradoan to provide them with a spreadsheet of all of our names, gender (protected field in OEO data base), salaries, etc. CSU provides employee numbers, titles, and salaries in online format that anyone can access. For names, a hard copy is available in the Library. State Senator John Kefalas is considering a change to CORA that would require the release of names in an electronic document.

A Faculty Council member asked if our database could include the hiring date, so that it would be easier for others to understand salary trends over time in a given department.

Miranda: We offer data since terminal degree but not date of hire.

Miranda added that faculty requested the salary equity exercise and that brought the topic to the attention of the Coloradoan this past year.

Should there be a centralized database? Is HR the most accurate database?

Miranda: Yes, but it doesn't list papers and awards received for each faculty.

Stephen Hayne (Business): How can you measure performance using the database?

Miranda: We don't measure performance from the database. We use Annual Reviews every year, and for P & T we use the CV's, etc, that are put in the packet. It takes more time, but is much more appropriate.

Cini Brown (VSPN): Any patterns that were revealed in this salary exercise?

Dan Bush (Vice Provost for Faculty Affairs): The simple answer is that the analysis found no patterns yet.

Diana Prieto (Director, OEO): As a part of affirmative action, we collect gender and race. These are highly protected, confidential data. When we report it, we only do so in an aggregate manner.

Elizabeth Williams (Liberal Arts): What are other institutions in Colorado doing? Is CSU standing alone?

Miranda: CU does give salary information similarly but not identically to what we do. However, it's not done uniformly across the state.

Miranda's report was received.

2. Faculty Council Chair – Mary Stromberger

Stromberger reported on the following:

1. President's Cabinet meeting: two policies are being developed for compliance reasons:
  - a. Research data accessibility – data collected through federal grants
  - b. Making web information accessible for those with disabilities (e.g. course materials). This is to meet ADA policies.
2. Open Records Act: Expand the Open Records act to include electronic information. Do FC members want Stromberger to continue to advocate to protect that information and keep it private? Should FC take a formal position? If so, please send Stromberger an email re: how to pursue it further. Stromberger wants to accurately represent Faculty.
3. Diversity-related issues – University of Missouri. It is a nation-wide issue. It is affecting faculty. For example, two faculty at U of M resigned as a part of the situation. A Kansas University faculty member was placed on academic leave re: racism discussion with graduate students; the conversation did not go well. Talking about issues of race and diversity are extremely sensitive. There is also an issue of academic freedom; yet how do we learn to talk about these issues as well? Three lessons learned at KU: a) perception by a faculty person on that campus that racism does not exist if not seen or heard; b) perception by that faculty that performance gaps among diverse students are due to poor academic performance only; and c) students feel there is a lack of training to assist them with creating an inclusive learning environment.

Stromberger is meeting with faculty to discuss how to make CSU a more inclusive environment. On November 16<sup>th</sup> there was student rally in support of the students at University of Missouri. The students at CSU, did not demand, but offered six recommendations. President Frank is looking at them now. One recommendation is to change curriculum that would require every student take a diversity course, and that courses offered under the Global and Cultural Awareness category of AUCC be more diversity focused. There is a need to do more for our diverse students and to create more inclusive environments. If there are resources you need, please let Stromberger know.

Maria Fernandez-Giminez (Natural Resources): The Faculty Institute for Inclusive Excellence is where faculty can learn how to have these conversations in their classes.

Stromberger's report was received.

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

No report was given as BOG will not meet until next week, December 10-11, 2015. The agenda is not out yet. Topics that Doherty anticipates being discussed: open record requests by the Coloradoan and the budget, including impacts of cuts to higher education due to the Tabor cap being reached.

Doherty's report was received.

### **CONSENT AGENDA**

1. UCC Minutes – October 23 and 30, 2015

Carole Makela, Chair, University Curriculum Committee, moved that Faculty Council approve the October 23 and October 30, 2015 UCC Minutes.

The consent agenda was unanimously approved.

### **ACTION ITEMS**

1. New CIOSU – Global Diversity Center, housed within the School of Global Environmental Sustainability – CUP

Eric Prince, Chair, Committee on University Programs, moved that Faculty Council approve the Global Diversity Center as an official Center.

Julie Savage-Fisher (Natural Resources): Are there going to be courses offered through the Center?

Stromberger called on Cini Brown (Agricultural Sciences, BSPM): Courses being taught are not one of the main foci. The Center will work with faculty and departments in collaboration. Courses will be offered through departments.

Eric Prince (Chair, CUP): The goals are very much about advancing scholarship and research.

The motion was unanimously approved by FC.

2. Proposed revisions to Sections C.2.1.4 Electorate for Faculty Council and Election Procedures and C.2.4.2.1.m Department Codes of the *Academic Faculty and Administrative Professional Manual* – CoFG

Don Estep, Chair of Committee on Faculty Governance, moved that FC approve the proposed revisions to Sections C.2.1.4 Electorate for Faculty Council and Election Procedures and C.2.4.2.1.m Department Codes of the *Academic Faculty and Administrative Professional Manual* as follows:

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

**C.2.1.4 Electorate for Faculty Council and Election Procedures** (~~last revised May 2, 2007~~)

The electorate eligible to vote for Faculty Council representatives from departments, colleges, and the Libraries shall consist of all regular full-time, regular part-time, senior teaching, special, and transitional members of the faculty. The Committee on Faculty Governance shall be responsible for annually apportioning the college representatives. The Committee on Faculty Governance shall establish uniform election and replacement practices throughout the University and shall supervise elections in departments, colleges, and the Libraries to ensure a secret ballot and impartial electoral procedures. Departmental and the Libraries representatives normally shall be elected in the first (1st) week of April. However, when departments are merged or when a new department comes into operation, it shall on or after the effective date of its establishment elect its departmental representative to serve immediately on the Faculty Council. Also, as soon as a department is abolished, its departmental representative shall no longer serve on the Faculty Council. The college representatives shall be elected in the third (3rd) week of April. The terms of office for elected representatives to the Faculty Council shall be three (3) years beginning July 1, with the terms of approximately one-third (1/3) of the entire body of elected representatives expiring each year. The Committee on Faculty Governance shall determine the length of terms of departmental and college representatives to ensure equity among colleges.

**C.2.4.2.1 Departmental Codes** (~~last revised June 21, 2011~~)

The departmental code shall provide for the following:

- a. Designation of the title of its administrative officer.
- b. Any administrative organization within the department if desired.<sup>3</sup>
- c. Statement of the departmental mission.

- d. Procedures relating to the review of candidates for new or vacated faculty member positions.
- e. Procedures relating to the review of recommendations for faculty members for acquiring tenure, for promotion in rank, and for reappointment.
- f. Procedures for appointing faculty members to graduate student advisory committees.
- g. Procedures for conducting annual and periodic comprehensive reviews of the performance of departmental faculty members as prescribed in Section E.14.
- h. Procedures relating to self evaluation of departmental operations.
- i. Procedures by which students may appeal academic decisions of their instructors. These procedures shall comply with the guidelines approved by Faculty Council (see Section I.7).
- j. A minimum of one (1) departmental faculty member meeting each semester of the academic year, with written notice given in advance by the department head.
- k. A periodic review of the departmental code as specified in Section C.2.4.2.2.e.
- l. Procedures for amending the code. These procedures shall require approval of a two-thirds (2/3) majority of the eligible faculty members of the department (as defined in Sections C.2.4.2) to amend the department code.
- m. A clear specification of the voting rights of all members of the department who are not faculty members with regular full-time, regular part-time, or transitional appointments not otherwise specified in the Manual.

Rationale:

*Faculty Council comprises the faculty partner in the shared governance of the University and is the chief organization charged with representing faculty in interactions with the Administration. In this capacity, Faculty Council represents **all** faculty, including both tenure track and non-tenure track faculty. In particular, it oversees policies that both fundamentally involve the activities of non-tenure track faculty and heavily impact non-tenure track faculty. The right to vote for one's representative is the cornerstone of a representative system. It is appropriate that non-tenure track faculty be afforded the opportunity to vote for the faculty members of Faculty Council that represent their organization.*

*Note: This motion has been approved by the CoNTTF.*

Discussion:

Doherty (Natural Resources): Does this include NTTF with joint administrative (AP) appointments?



Don Estep (CoFG): I don't know. I could go and look if that is an issue.

Ray Hogler (Business): Is this about voting rights? There are all kinds of appointments at this university. Senior teaching faculty don't seem to cover NTT faculty.

Don Estep (CoFG): The intention is not to include temporary instructors hired on a semester basis.

Ray Hogler (Business): What about those faculty who are hired for one year?

Don Estep (CoFG): We are aware of these issues. The committee felt the main issue is around "who is allowed to vote." Departments are required to specify in their code re: voting rights. They could assign this voting right to all faculty. This motion will ensure that senior and special appointment faculty are given right to vote. All other appointments' voting privileges are determined at the department level.

Jen Aberle (Chair, NTTF) provided further clarification that the motion applied only to special teaching and special appointment NTTF, and not temporary NTTF faculty.

Stromberger: Any more discussion? No.

The motion was approved by majority vote, pending final approval by the Board of Governors.

3. Proposed revisions to the Graduate and Professional Bulletin – SCHOLASTIC STANDARDS – CoSRGE

Bill Sanford, Vice Chair of CoSRGE, moved that FC approve the proposed revisions to the *Graduate and Professional Bulletin* – Scholastic Standards as follows:

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

**Scholastic Standards**

Grades of C or higher must be earned in all required courses on a Program of Study. D grades may be accepted in background courses, but such courses must be included in the computation of the cumulative grade point average. (1) Graduate students may take such 100 and 200 level courses for general enlightenment or to satisfy a background requirement. These courses are not to be included in the student's program of study, and grades earned in such courses will not be considered in computing the graduate grade point averages described above. (2) Once admitted to a graduate program, grades earned in courses 300 level and above will be considered in computing the graduate GPA.

Standards and requirements for off-campus graduate study are the same as those

standards and requirements on campus. The academic department head has the basic responsibility for the implementation of this policy. (3)Note that only courses with a grade of B or better may be accepted as transfer courses and such courses are not included in the student's calculation of grade point averages.

~~Course numbering at Colorado State is based on the content level of material presented in a course.~~

(4)Course Number Range	Title
100-299	<del>Courses primarily for freshman and sophomore students.</del>
300-499	<del>Courses primarily for junior and senior students. Acceptable for graduate credit for students holding bachelor's degrees when approved by the student's graduate committee.</del>
500-599	<del>Courses primarily for students enrolled in master's degree programs or equivalents. Qualified junior and senior students may enroll.</del>
600-699	<del>Courses primarily for students enrolled in master's level programs or equivalents. Undergraduate students may not enroll to satisfy undergraduate degree requirements.</del>
700-799	<del>Courses primarily for students enrolled in Ph.D. level programs or equivalents and professional veterinary medicine courses. Undergraduate students may not enroll unless they also have been admitted to graduate (Integrated Degree Program (IDP) admits).</del>

~~(1)Graduate credit is not granted for completion of courses numbered at the 100 and 200 level. Graduate students may take such courses for general enlightenment or to satisfy a background requirement. Grades earned in such courses will not be considered in computing the graduate grade point averages described above.~~

For thesis, dissertation, research, and independent study graduate courses, the number of student credit hours earned will be determined using a base rate of 48 hours of student effort per credit hour. The faculty advisor, or other department official, shall estimate the total number of hours of student effort required over the length of the semester. This effort shall include consultation with the advisor, as well as library, laboratory, field, or

studio work. The total number of hours shall be divided by 48 and the resultant quotient (rounded off to a whole number) shall define the number of credits to be awarded.

**Rationale:**

- (1) *Rationale for deletions in section starting with "Graduate credit is not granted..."*  
 The paragraph is not being removed from the policy, however, it was revised and moved up one paragraph to keep the content consistent. In addition, the revised wording is to emphasize that 100 and 200 level courses are not to be in the program of study (not listed in GS6 form), period. This new language makes this point clear.
- (2) & (3) Content that provides written information regarding GPA calculations previously not provided in the Bulletin.
- (4) The table in the Course Number Range section was removed. Now that the Bulletin is incorporated into the Catalog, this table is redundant with the table already in the Catalog.

**Discussion:**

Antonio Pedros-Gascon (Languages, Literatures and Cultures): Could we have more information about the 300-level courses? Are 300-level courses allowed?

Bill Sanford (Natural Resources): At the University level, they are allowed. They have to be put on the GS-6.

Carole Makela (UCC): The Graduate School has the maximum number of credits at 300-400 level classes. However, some graduate programs indicate all courses must be 500 level or above. Programs vary considerably.

The motion was approved by majority vote.

**DISCUSSION**

1. FY17 budget  
 -Rick Miranda, Provost/Executive Vice

(See Miranda's slides – website).

Miranda presented Draft 2.2 of the incremental change to the E&G budget. Incremental = only looking at changes to the budget from this year to next year.

Miranda gave a brief summary of CSU's total budget, which is about \$1 billion. About a third of this is research revenue and expenses. Another \$150 million is in auxiliary

enterprises, including Housing and Dining. Another \$100 million is in the miscellaneous category, which includes debts. This leaves about \$400 million in the Education and General (E&G) budget.

Miranda explained that the state might cut CSU's E&G budget next year. The Tabor law, which caps revenue in the State of Colorado. Fees have been added to the state budget but is used for a specific expense (e.g. hospital provider fees), and these fees are included in Tabor revenue. The Tabor cap is allowed to grow each year by a certain percent, but it is not growing at the rate of revenue increases. The governor is predicting that the Tabor cap will be reached next year, which means the general budget will be cut. The governor is proposing a \$20 million cut to higher education, which will be about a \$4 million cut to CSU.

Miranda explained the anticipated new revenues (\$19 million, after the \$4 million cut) and new expenses for FY17. CSU feels pressure to keep education affordable. Last year, there was a cap. We raised tuition a little less than 6% last year. We are trying to hold tuition down to about 5% range. Will the state force us to cap tuition? They may depending on state appropriations. This has not been determined yet. CSU is modeling around a 5% increase in tuition; even though we will experience a cut from the state. We could also enjoy more revenue with more student enrollment. We budget for flat enrollment; if we have more students, it goes in the budget for the next year.

The State has predicted no raise in FY17 for State Classified employees. What about AP and Faculty? Usually we take our cue from the state – so the same average raise is maintained across the state. However, because we are no longer in a recession, it doesn't make sense for faculty and AP's to not receive a raise next year. Right now Miranda is modeling a 1.8% salary increase for faculty and AP's. Miranda proposes to delay the last of the 1% increase to DCP, originally scheduled for FY17, for another year, to save on expenses. Miranda discussed other expenses, including the distribution of tuition from enrollment growth to colleges (1/2), the general fund (1/3), and the Provost's Office (1/6). Miranda would also like the budget to include an increase to the raise that faculty get when promoted and tenured to the Associate level, from 5% to 10%. For new commitments and quality enhancements, about \$2.5 million have already been promised, mainly for salaries of new hires as well as \$1 million for a new cluster hire. In order to balance the budget, there needs to be a 2% reallocation within all academic units and divisions. These are discussion points on the table at the BOG meeting next week.

Stromberger: Where is the base for salary increases coming from, as a result of the salary equity exercise?

Miranda: It would come out of the Commitments line item.

Paul Doherty (Natural Resources) asked is it possible to delay the next round of cluster hires, and use the funds for something else.

Stromberger: What is best for faculty and our university? Alan Rudolph, Vice President for Research, reported at a Cabinet meeting that CSU is at research capacity with the current faculty. To increase research capacity, we need to add more tenure-track faculty. What is best for the University – add more tenure-track faculty or invest more into the salary raise to help retain our current faculty?

Miranda: Hopefully we do both. These types of questions have tensions between them. The discussion is--where should the balance be?

Stephen Hayne (Business): Have you looked at compression that is taking place as you phase in the 10% for associate professors?

Miranda: The 10% raise will cause some compression, particularly for newly promoted Associate Professors (who got the 5% raise). This will cause inequities that will need to be addressed. Miranda is committed to doing so.

Stromberger: Should a 1.8% salary increase be called a merit increase? It really is an increase due to inflation. Will CSU ever get to a point where employees have a true merit raise?

Miranda: I would like CSU to get there.

Ray Hogler (Business): Are there plans to keep down the number of NTTF as their increase in numbers is quite high?

Miranda: The increase in NTTF has come in the last five year. Miranda does not predict we will be growing the NTTF at the same rate as the last five years. Miranda is committed to hiring regular faculty.

Margarita Lenk (Business): It is nice to have this budget presented to the faculty before the BOG meeting.

Stromberger adjourned the meeting 5:54 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
<b>Stephen Coleman</b>	Animal Sciences	2018
<b>Scott Nissen</b>	Bioagricultural Sciences & Pest Management	2018
<b>Bradley Goetz</b>	Horticulture & Landscape Architecture	2016
<b>Francesca Cotrufo</b>	Soil and Crop Sciences	2017
<u>Milt Thomas</u>	College-at-Large	2016
<u>Jason Ahola</u>	College-at-Large	2017

**Health and Human Sciences**

<b>Stephanie Clemons</b>	Design and Merchandising	2016
<b>Tracy Nelson</b>	Health and Exercise Science	2016
<b>David Sampson</b>	Food Science and Human Nutrition	2016
<b>Allison Bielak</b>	Human Development and Family Studies	2018
(Substituting for Lisa Daunhauer – Sabbatical)		
<b>Scott Glick</b>	Construction Management	2017
<b>Barb Hooper</b>	Occupational Therapy	2017
<b>Tom Chermak</b>	School of Education	2018
Jennifer Portz	School of Social Work	2016
(Eunhee Choi substituting Fall 2015)		

**Business**

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

**Engineering**

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

### **Liberal Arts**

<b>Michael Pante</b>	Anthropology	2017
<u>Eleanor Moseman</u>	Art	2017
<b>Elizabeth Williams</b>	Communication Studies	2016
Robert Keller	Economics	2016
(David Mushinski substitute for Robert Keller)		
<b>Toby Jacobi</b>	English	2018
Sue Doe (starts January 2016)		
<b>Ernesto Sagas</b>	Ethnic Studies	2017
<b>Antonio Pedros-Gascon</b>	Languages, Literatures and Cultures	2018
<b>Adrian Howkins</b>	History	2017
<b>Jangyul Kim</b>	Journalism and Technical Communication	2017
<b>Gary Moody</b>	Music, Theater, and Dance	2016
TBD	Philosophy	2018
<u>Kyle Saunders</u>	Political Science	2018
<b>Ken Berry</b>	Sociology	2016
<b>Eric Aoki</b>	College-at-Large	2016
<b>Mohammed Hirchi</b>	College-at-Large	2017
Zach Hutchins (starts Jan. '16)	College-at-Large	2016
TBD	College-at-Large	2018
TBD	College-at-Large	2018

### **Natural Resources**

<b>Monique Rocca</b>	Ecosystem Science and Sustainability	2017
<b>Julie Savidge</b>	Fish, Wildlife, & Conservation Biology	2016
(thru Spring 2016)		
<b>Maria Fernandez-Gimenez</b>	Forest and Rangeland Stewardship	2017
<b>William Sanford</b>	Geosciences	2017
<b>Stuart Cottrell</b>	HDNR in Warner College	2017

### **Natural Sciences**

<u>Tom Santangelo</u>	Biochemistry and Molecular Biology	2016
<u>Melinda Smith</u>	Biology	2018
<b>George Barisas</b>	Chemistry	2017
<b>Ross McConnell</b>	Computer Science	2016
<u>Iuliana Oprea</u>	Mathematics	2017
<u>Mingzhong Wu</u>	Physics	2017
<u>Zinta Byrne</u>	Psychology	2016
<u>Mary Meyer</u>	Statistics	2016
<u>Ed DeLosh</u>	College-at-Large	2017
<u>Christos Papadopoulos</u>	College-at-Large	2016
<b>Janice Moore</b>	College-at-Large	2018
<u>Brad Conner</u>	College-at-Large	2018
<b>Alan Van Orden</b>	College-at-Large	2018

### **Veterinary Medicine & Biomedical Sciences**

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

### **University Libraries**

<b>Nancy Hunter</b>	Libraries	2017
<b>Rachel Erb</b>	At-Large	2016

### ***Ex Officio Voting Members***

<b>Mary Stromberger</b>	Chair, Faculty Council/Executive Committee	2016
<b>Stephanie Clemons</b>	Vice Chair, Faculty Council	2016
<b>Paul Doherty, Jr.</b>	BOG Faculty Representative	2016
<b>Don Estep, Chair</b>	Committee on Faculty Governance	2016
<u>Todd Donovan, Chair</u>	Committee on Intercollegiate Athletics	2016
<u>Jerry Magloughlin, Chair</u>	Committee on Libraries	2016
<b>Jennifer Aberle, Chair</b>	Committee on Non-Tenure Track Faculty	2016
<u>Bill Hanneman, Chair</u>	Committee on Responsibilities & Standing of Academic Faculty	2016
<b>Don Samelson, Chair</b>	Committee on Scholarship Research and Graduate Education	2016
<b>Melinda Frye, Chair</b>	Committee on Scholastic Standards	2016
<b>Katharine Leigh, Chair</b>	Committee on Strategic and Financial Planning	2016
<b>Anton Betten, Chair</b>	Committee on Teaching and Learning	2016
<b>Eric Prince, Chair</b>	Committee on University Programs	2016
<b>Carole Makela, Chair</b>	University Curriculum Committee	2016

### ***Ex-Officio Non-Voting Members***

<b>Anthony Frank</b>	President
<b>Rick Miranda</b>	Provost/Executive Vice President
<b>Brett Anderson</b>	Vice President for Advancement
<b>Mary Ontiveros</b>	Vice President for Diversity
<b>Lou Swanson</b>	Vice Provost for Engagement/Director of Extension
<b>Robin Brown</b>	Vice President for Enrollment and Access
<b>Dan Bush</b>	Vice Provost for Faculty Affairs
<b>Patrick Burns</b>	Vice President for Information Technology/Dean Libraries



***Ex-Officio Non-Voting Members Cont'd***

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
Kathleen Pickering	Vice Provost for Undergraduate Affairs
Amy Parsons	Vice President for University Operations
Ajay Menon	Dean, College of Agricultural Sciences
Jeff McCubbin	Dean, College of Applied 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 Veterinary Medicine & Biomedical Sciences
John Hayes	Dean, Warner College of Natural Resources
Toni-Lee Viney	Chair, Administrative Professional Council

**BALLOT**  
**March 1, 2016**  
**Graduate Student Positions on Faculty Council Standing Committees**  
**(One-Year Term)**

**University Curriculum Committee**

**Term Expires**

ALISTAIR COOK

Graduate Student

2016

**Committee on Teaching and Learning**

LINDSAY LAMMERS

Graduate Student

2017

Annual Report of the University Grievance Officer for 2015

During calendar year 2015, Kirk Hallahan was the UGO from January 1 to June 30, and Richard Eykholt was the UGO from July 1 to December 31. One duty of the UGO is to oversee the disciplinary process for tenured faculty, as described in Section E.15 of the Manual. During calendar year 2105, this process was never initiated.

Another duty of the UGO is to manage the grievance process, as described in Section K of the Manual. During calendar year 2015, the two UGO's dealt with cases from 19 faculty members and 9 administrative professionals. The distribution of the 19 faculty cases by college is as follows:

Agricultural Sciences	5
Business	2
Engineering	1
Liberal Arts	5
Natural Sciences	4
Vet. Med.& Biom. Sci.	2

The distribution of the 9 administrative professional cases is as follows:

Engineering	1
Liberal Arts	2
Natural Resources	1
Student Affairs	3
University Advancement	1
Vet. Med. & Biom. Sci.	1

Before summarizing these cases, it is important to note that, if a case is ruled not to be grievable, then it cannot be pursued through the grievance process. However, the UGO can choose to hold off on making this determination in order to have discussions with the persons involved and even to allow the case to proceed to formal mediation. However, a case cannot proceed to a formal hearing unless it is ruled to be grievable.

For the 9 cases involving administrative professionals, four cases involved termination. Three of these four cases were ruled not to be grievable, since administrative professionals are employed at-will, but the other case involved a claim of racial discrimination, so it was referred to OEO, and it was not pursued through the grievance process. One case involved a complaint about a supervisor from an employee who had already resigned, so it was ruled not to be grievable, but the person was referred to OEO for an exit interview. Four cases involved complaints about performance reviews. One of these four cases was ruled not to be grievable, since a performance improvement plan had been implemented. Two of these four cases were resolved through discussions between the UGO and the persons involved, with a new supervisor re-evaluating the

two employees. The other case was resolved through formal mediation. None of these 9 cases resulted in a formal hearing, and only one of the cases resulted in formal mediation.

For the 19 cases involving faculty members, 12 cases involved tenure-track faculty, 6 cases involved special faculty, and one case involved an affiliate faculty. The affiliate faculty member did not feel that this classification was appropriate for his involvement with CSU. This was resolved through discussions between the UGO and the persons involved. For the 6 cases involving special faculty, one case involved a performance review, one case involved a dispute over a termination date, and one case involved workload and scheduling. All three of these cases were resolved through discussions between the UGO and the persons involved. One case involved a claim of salary inequity, and it was resolved through discussions between the UGO and the persons involved, with a salary restructuring occurring within the unit. One case involved a delay in processing an application for promotion, but it was resolved without the intervention of the UGO, so it was not pursued through the grievance process. One of these cases involved a dispute over the total amount of compensation. This was due to a misunderstanding of contract language and was resolved through discussions between the UGO and the persons involved. None of the 7 cases involving non-tenure-track faculty members resulted in a formal hearing, and none of these cases involved formal mediation.

For the 12 cases involving tenure-track faculty, five cases involved complaints about performance reviews. Three of these five cases were resolved through discussions between the UGO and the persons involved. One of these five cases involved a claim of sexual harassment, so it was referred to OEO, and it was not pursued through the grievance process. For the other case, the faculty member decided not to pursue the issue through the grievance process. One case involved a complaint about the amount of an annual salary increase, and this case was resolved through formal mediation. One case involved a claim of salary inequity by a female full professor, and, after a discussion between the UGO and the Provost, it is being addressed by the current initiative addressing such salary inequities. One case involved dissatisfaction with the change in salary after a change in employment status, and the faculty member decided not to pursue the issue through the grievance process. One case involved a dispute over travel reimbursement, and this was resolved through discussions between the UGO and the persons involved. One case involved a dispute between co-PI's on a grant, and it was ruled not to be grievable, since it was a dispute between faculty members. One case involved an administrator placing restrictions on the activities of a faculty member, and this case was resolved through formal mediation. One case involved a recommendation for denial of tenure, and this case is still active. Since this case is very recent, the UGO has not yet gotten involved officially. For the 11 cases involving tenure-track faculty members that have been resolved, none resulted in a formal hearing, and two resulted in formal mediation. The one case that is still active has not yet progressed beyond the initial contact stage.

In summary, there were 28 cases, with 12 cases involving tenure-track faculty members, 7 cases involving non-tenure-track faculty members, and 9 cases involving administrative professionals. One case involving a tenure-track faculty member is still active and has not progressed beyond the initial contact stage. Six cases were ruled not to be grievable (five for administrative professionals and one for a tenure-track faculty member). Two cases were referred to OEO, rather than being pursued through the grievance process (one for a tenure-track faculty member

and one for an administrative professional). In three of the remaining cases, the person decided not to pursue the case through the grievance process (two tenure-track faculty members and one non-tenure track faculty member). Of the remaining 16 cases, none resulted in a formal hearing, three resulted in formal mediation (two for tenure-track faculty and one for an administrative professional), and the remaining 13 cases were resolved through discussions between the UGO and the persons involved.

Submitted by: Richard Eykholt,  
University Grievance Officer

A regular meeting of the University Curriculum Committee was held on November 6, 2015, at 2:00 p.m.

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

Guests: Yvonne Bridgeman, Kelley Brundage, Linda Selkirk.

Absent: Graduate representative, Kathleen Pickering (ex-officio).

### **Minutes**

The Minutes of October 30, 2015 were approved.

### **Experimental Course Report**

The Experimental Course Report was received.

### **Consent Agenda**

The Consent Agenda was approved.

### **New Courses**

### ***Effective Date***

**BSPM 355C 01(1-0-0). Horticulture Pathology: Vegetable and Greenhouse Disease. F.**

Fall 2016

Prerequisite: BSPM 355A.

Restriction:

Registration Information: Written consent of instructor.

Diseases in greenhouse and vegetable crops, management and control.

[Approved as an online course.]

**CS 165 04(3-2-0). CS2: Java – Data Structures and Algorithms. F, S.**

Fall 2016

Prerequisite: (CS 163 with a C or better or CS 164 with a C or better) and MATH 160 with a C or better.

Restriction:

Registration Information: Must register for lecture and laboratory.

Object oriented concepts, assertions, inheritance, polymorphism, algorithms and data structures using Java.

**CS 220 04(3-0-1). Discrete Structures and their Applications. F, S.**

Fall 2016

Prerequisite: CS 165 with a C or better; MATH 160 with a C or better.

Restriction:

Registration Information: Must register for lecture and recitation.

Integer representations and properties, propositions, predicates, sets, functions, program proofs, induction, counting, complexity; Python implementations of these concepts.

**ERHS 534 03(3-0-0). SAS and Epidemiology Data Management. F.**

Fall 2016

Prerequisite: None.

Restriction: Graduate only.

Registration Information: Graduate standing in Environmental Health.

Basic concepts and skills necessary for data management and analyses using SAS programming in epidemiology.

University Curriculum Committee

November 6, 2015

Page 2

**SPCM 382A 03(3-0-0). Bridging Cultures: USA-Italy. SS.**

Summer 2016

Prerequisite: SPCM 200.

Restriction:

Registration Information:

Theory, concepts, principles, research methods, and practical skills in the areas of intercultural and cross-cultural communication, construction and negotiation of Italian identity (italianità), and strategies of an effective dialogue with a global mindset. The aim of the course is to transform its participants into culturally aware and skilled global citizens, with the empirical experience of cultural bridging.

[Approved as a Study Abroad course.]

**SPCM 482A 03(3-0-0). Cinematic Rome. SS.**

Summer 2016

Prerequisite: Concurrent registration in SPCM 382.

Restriction:

Registration Information: Completion of AUCC Category 2.

Evaluate and discuss ten primary films, along with excerpts from a number of others. Topics: Images of Ancient Rome; Italian Fascism and Its Memory; Italian Neorealism; Images of “Americans” in Rome, and Rome in America; Fellini’s Rome; and Urban Angst, Roman Style. Analyze how Rome functions as a “character” in the movies, the artistic representations of Roman monuments and streetscapes, and the rhetorical functions of Italian cinema.

[Approved as a Study Abroad course.]

### **Major Change to Courses**

**ETST 319/~~ANTH 319~~ 03(3-0-0). Latin American Peasantries. F, S.**

Fall 2016

Prerequisite: ANTH 100 or ANTH 200 or ETST 100.

Restriction:

Registration Information: Credit not allowed for both ETST 319 and ANTH 319.

Sociocultural, economic, and political responses of Latin American peasantries to poverty and global processes.

### **New Programs**

College of Business

Effective Spring 2016

Department of Marketing

Certificate in Market Research and Data Analytics

<u>MKT 370</u>	<u>Digital Marketing</u>	<u>3</u>
<u>MKT 410</u>	<u>Marketing Research</u>	<u>3</u>
<u>MKT 450</u>	<u>Marketing Analytics</u>	<u>3</u>



### **Major Change to Curricula**

College of Natural Sciences

Effective Fall 2016

Department of Physics

Major in Physics

Physics Concentration

Change approved, program is being edited and will be published in later UCC minutes.

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University Curriculum Committee

November 6, 2015

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The meeting adjourned at 4:25 p.m.

(FC)

Carole Makela, Chair

Yvonne Bridgeman, Secretary



A regular meeting of the University Curriculum Committee was held on November 13, 2015, at 2:00 p.m.

Members present: Chair Carole Makela, Professors Bradley Goetz, Paul Mallette, Brad Reisfeld, Mike Hogan, Ed DeLosh, Sally Sutton, Howard Ramsdell, Beth Oehlerts, undergraduate representative Tyler Siri, Kathleen Pickering (ex-officio).

Guests: Yvonne Bridgeman, Kelley Brundage.

Absent: Graduate representative.

### Minutes

The Minutes of November 6, 2015 were approved.

### Experimental Course Report

The Experimental Course Report was received.

### Consent Agenda

The Consent Agenda was approved.

### 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.

Restriction: No Freshman.

Registration Information:

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

**FIN 661 03(3-0-0). Advanced Portfolio Management.** Every year, semester varies.

Spring 2017

Prerequisite: FIN 605; FIN 655.

Restriction: Graduate only.

Registration Information: Written consent of advisor.

Portfolio management, asset allocation, and asset selection theory and techniques.

[Approved as a face-to-face and online course.]

**POLS 482 03(3-0-0). Politics and Culture in Turkey.** SS.

Summer 2016

Prerequisite: POLS 241.

Restriction: No Freshman.

Registration Information: Required field trips. Written consent of instructor.

Politics, history and material culture of Turkey.

[Approved as a Study Abroad course.]

### Major Change to Courses

**CS 370 03(3-0-0). Operating Systems.** F, S.

Fall 2018

Prerequisite: (CS ~~200-253~~ with a minimum grade of C) and (CS 270 with a minimum grade of C or ECE 251 with a minimum grade of C) and (CS 220 with a minimum grade of C).

Restriction:

Registration Information: Sections may be offered Online.

Introduction to operating systems including memory organization, I/O control, multitasking, process control, coordination, and resource management.

**Major Change to Curricula**

College of Liberal Arts  
 Department of Art and Art History  
 Bachelor of Arts in Art  
 Studio Concentration

Effective Spring 2016

A minimum grade of C (2.000) must be achieved in each upper-division art course in the student's concentration.

**Freshman**

	AUCC Credits
<u>ART 105</u> Issues and Practices in Art	1
<u>ART 110</u> Art History I	3
<u>ART 111</u> Art History II	3
<u>ART 135</u> Introduction to Drawing	3
<u>ART 136</u> Introduction to Figure Drawing	3
<u>ART 160</u> Two-Dimensional Visual Fundamentals	3
<u>ART 170</u> Three-Dimensional Visual Fundamentals	3
<u>CO 150</u> College Composition (GT-CO2)	1A 3
<u>Arts and Humanities</u> <sup>1</sup>	3B 3
<u>Global and Cultural Awareness</u>	3E 3
<u>Mathematics</u>	1B 3
Total Credits	31

**Sophomore**

<u>ART 212</u> Art History III	3
Select two courses from the following:	
<u>ART 230</u> Photo Image Making I	3
<u>ART 235</u> Intermediate Drawing I	3
<u>ART 240</u> Pottery I	3
<u>ART 245</u> Metalsmithing and Jewelry I	3
<u>ART 250</u> Fibers I	3
<u>ART 255</u> Introduction to Graphic Design	3
<u>ART 256</u> Introduction to Electronic Art	3
<u>ART 260</u> Painting I	3
<u>ART 265</u> Printmaking I-Intaglio and Relief	3
<u>ART 270</u> Sculpture I	3
Upper-Division Art History <sup>2</sup>	4A,4B 3
Upper-Division Art History - Select from list below	4A,4B 3
L*** Foreign Language	10
<u>Biological and Physical Sciences</u>	3A 7
<u>Social and Behavioral Sciences</u>	3C 3
Total Credits	32

**Junior**

Upper-division Art History <sup>2</sup>	4A,4B 3
Upper-Division Art History - Select 3 credits not taken previously from the list below	4A,4B 3
Upper-Division Concentration <sup>3,2</sup>	8
Art Electives	6

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<u>Advanced Writing</u>	2	3
<u>Arts and Humanities</u> <sup>1</sup>	3B	3
<u>Historical Perspectives</u>	3D	3
Upper-Division General Electives <sup>4,5</sup>		3
Total Credits		29

**Senior**

Select four credits from the following in the appropriate concentration:		
<u>ART 430</u> Advanced Photo Image Making I	4C	4
<u>ART 431</u> Advanced Photo Image Making II	4C	4
<u>ART 435</u> Advanced Drawing I	4C	4
<u>ART 436</u> Advanced Drawing II	4C	4
<u>ART 440</u> Pottery IV	3C	4
<u>ART 441</u> Pottery V	4C	4
<u>ART 445</u> Metalsmithing and Jewelry IV	4C	4
<u>ART 446</u> Metalsmithing and Jewelry V	4C	4
<u>ART 450</u> Fibers IV	4C	4
<u>ART 451</u> Fibers V	4C	4
<u>ART 460</u> Advanced Painting I	4C	4
<u>ART 461</u> Advanced Painting II	4C	4
<u>ART 465</u> Printmaking IV-Studio Workshop	4C	4
<u>ART 466</u> Printmaking V-Studio Workshop	4C	4
<u>ART 470</u> Sculpture IV	4C	4
<u>ART 471</u> Sculpture V	4C	4
Upper-Division Art Electives		3
Non-Art Electives		3
Upper-Division General Electives <sup>4,5</sup>		18
Total Credits		28
Program Total Credits:		120

Upper-Division Art History Courses

AUCC Credits

To complete category 4A and 4B of the All-University Core Curriculum (AUCC), at least three credits must be selected.

<u>ART 310</u>	<u>History of American Art to 1945</u>	<u>4A,4B</u>
<u>ART 311</u>	<u>Art of Africa</u>	<u>4A,4B</u>
<u>ART 312</u>	<u>History of Pre-Columbian Art</u>	<u>4A,4B</u>
<u>ART 314</u>	<u>Women in Art History</u>	<u>4A,4B</u>
<u>ART 315</u>	<u>United States Art 1945-1980</u>	<u>4A,4B</u>
<u>ART 316</u>	<u>Art of the Pacific</u>	<u>4A,4B</u>
<u>ART 317</u>	<u>Native North American Art</u>	<u>4A,4B</u>
<u>ART 410</u>	<u>Greek Art</u>	<u>4A,4B</u>
<u>ART 411</u>	<u>History of Medieval Art</u>	<u>4A,4B</u>
<u>ART 412</u>	<u>History of Renaissance Art</u>	<u>4A,4B</u>
<u>ART 414</u>	<u>History of Baroque and Rococo Art</u>	<u>4A,4B</u>
<u>ART 415</u>	<u>History of 19th Century European Art</u>	<u>4A,4B</u>
<u>ART 416</u>	<u>History of European Art, 1900 to 1945</u>	<u>4A,4B</u>
<u>ART 417</u>	<u>Roman Art</u>	<u>4A,4B</u>
<u>ART 418</u>	<u>Contemporary Artists and Art Critics</u>	<u>4A,4B</u>

<sup>1</sup> Select from the list of courses in category 3B (other than ART 100) in the All-University Core Curriculum (AUCC). Only 3 of the 6 credits required for Arts and Humanities may come from intermediate (L\*\*\* 200 and L\*\*\* 201) foreign language courses.

<sup>2</sup> Choose eight upper-division credits in one area of concentration in addition to the four credit capstone course. ~~Select six credits upper-division Art History. In order to complete category 4A and 4B of the AUCC, at least three credits must come from the following: ART 310, ART 311, ART 312, ART 314, ART 315, ART 316, ART 319, ART 410, ART 411, ART 412, ART 414, ART 415, ART 416, and ART 417.~~

<sup>3</sup> Select enough elective credits to bring program total to a minimum of 120 credits, of which at least 42 must be upper-division (300- to 400- level). ~~Choose eight upper-division credits in one area of concentration in addition to the four credit capstone course.~~

<sup>4</sup> Select enough elective credits to bring program total to a minimum of 120 credits, of which at least 42 must be upper-division (300- to 400- level).



**College of Liberal Arts  
Department of Art and Art History  
Bachelor of Fine Arts**

**Effective Spring 2016**

**In addition to the following, students must complete a concentration in this major.**

**Freshman**

	<b>AUCC Credits</b>
<u>ART 105</u> Issues and Practices in Art	1
<u>ART 110</u> Art History I	3
<u>ART 111</u> Art History II	3
<u>ART 135</u> Introduction to Drawing	3
<u>ART 136</u> Introduction to Figure Drawing	3
<u>ART 160</u> Two-Dimensional Visual Fundamentals	3
<u>ART 170</u> Three-Dimensional Visual Fundamentals	3
<u>CO 150</u> College Composition (GT-CO2)	1A 3
<u>Arts and Humanities</u> <sup>1</sup>	3B 3
<u>Global and Cultural Awareness</u>	3E 3
<u>Mathematics</u>	1B 3
<b>Total Credits</b>	<b>31</b>

**Sophomore**

<u>ART 212</u> Art History III	3
Select three courses from the following:	
<u>ART 230</u> Photo Image Making I	3
<u>ART 240</u> Pottery I	3
<u>ART 245</u> Metalsmithing and Jewelry I	3
<u>ART 250</u> Fibers I	3
<u>ART 255</u> Introduction to Graphic Design	3
<u>ART 256</u> Introduction to Electronic Art	3
<u>ART 260</u> Painting I	3
<u>ART 265</u> Printmaking I-Intaglio and Relief	3
<u>ART 270</u> Sculpture I	3
<u>ART 235</u> Intermediate Drawing I	3
Upper-Division Art History <sup>2</sup>	4A,4B 3
<u>Biological and Physical Sciences</u>	3A 7
<u>Historical Perspectives</u>	3D 3
<u>Social and Behavioral Sciences</u>	3C 3
<b>Total Credits</b>	<b>31</b>

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### Junior

Concentration required course selection	8
Art Electives	4
Upper-Division Art History <sup>2</sup>	4A,4B 3
Upper-Division Art Elective	4
<u>Advanced Writing</u>	2 3
<u>Arts and Humanities</u>	3B 3
Upper-Division Non-Art Elective	3
Elective	3
Total Credits	31

### Senior

Concentration required course selection	4C 8
Upper-Division Art Elective	4
Non-art electives <sup>3</sup>	15
Total Credits	27
Program Total Credits:	120
Upper-Division Art History Courses <sup>2</sup>	

### AUCC Credits

To complete category 4A and 4B of the All-University Core Curriculum (AUCC), at least three credits must be selected.

<u>ART 310</u>	History of American Art to 1945	4A,4B
<u>ART 311</u>	<u>Art of Africa</u>	<u>4A,4B</u>
<u>ART 312</u>	History of Pre-Columbian Art	4A,4B
<u>ART 314</u>	Women in Art History	4A,4B
<u>ART 315</u>	United States Art 1945-1980	4A,4B
<u>ART 316</u>	Art of the Pacific	4A,4B
<u>ART 319</u>	History of Graphic Design	4A, 4B
<u>ART 317</u>	<u>Native North American Art</u>	<u>4A,4B</u>
<u>ART 410</u>	Greek Art	4A,4B
<u>ART 411</u>	History of Medieval Art	4A,4B
<u>ART 412</u>	History of Renaissance Art	4A,4B
<u>ART 414</u>	History of Baroque and Rococo Art	4A,4B
<u>ART 415</u>	History of 19th Century European Art	4A,4B
<u>ART 416</u>	History of European Art, 1900 to 1945	4A,4B
<u>ART 417</u>	Roman Art	4A,4B
<u>ART 418</u>	<u>Contemporary Artists and Art Critics</u>	<u>4A,4B</u>

<sup>1</sup> Select from the list of courses (other than ART 100) in category 3B in the All-University Core Curriculum (AUCC). Only 3 of the 6 credits required for Arts and Humanities may come from intermediate (L\*\*\* 200 and L\*\*\* 201) foreign language courses.

<sup>2</sup> Select six credits of upper-division art history. To complete category 4A and 4B of the All-University Core Curriculum (AUCC), at least three credits must be from the Upper-Division Art History list.

<sup>3</sup> 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).



**College of Liberal Arts  
Department of Art and Art History  
Bachelor of Fine Arts  
Graphic Design Concentration**

**Effective Spring 2016**

**In addition to the Art (B.F.A.) core courses, the following must be completed:**

<b>Code</b>	<b>Title</b>	<b>AUCC</b>	<b>Credits</b>
<b>JUNIOR</b>			
ART 355	Typography and Design Systems		4
ART 356	Illustration		4
<b>SENIOR</b>			
ART 455	Advanced Typography and Design Systems	4C	4
ART 456	Advanced Illustration	4C	4



**College of Liberal Arts  
Department of Art and Art History  
Bachelor of Fine Arts  
Metalsmithing Concentration**

**Effective Spring 2016**

**In addition to the Art (B.F.A.) core courses, the following must be completed:**

<b>Code</b>	<b>Title</b>	<b>AUCC</b>	<b>Credits</b>
<b>JUNIOR</b>			
ART 345	Metalsmithing and Jewelry II		4
ART 346	Metalsmithing and Jewelry III		4
<b>SENIOR</b>			
ART 445	Metalsmithing and Jewelry IV	4C	4
ART 446	Metalsmithing and Jewelry V	4C	4



**College of Liberal Arts  
Department of Art and Art History  
Bachelor of Fine Arts  
Photo Image Making Concentration**

**Effective Spring 2016**

**In addition to the Art (B.F.A.) core courses, the following must be completed:**

<b>Code</b>	<b>Title</b>	<b>AUCC</b>	<b>Credits</b>
<b>JUNIOR</b>			
ART 330	Photo Image Making II		4
ART 331	Photo Image Making III		4
<b>SENIOR</b>			
ART 430	Advanced Photo Image Making I	4C	4
ART 431	Advanced Photo Image Making II	4C	4



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**College of Liberal Arts  
Department of Art and Art History  
Bachelor of Fine Arts  
Painting Concentration**

**Effective Spring 2016**

**In addition to the Art (B.F.A.) core courses, the following must be completed:**

Code	Title	AUCC	Credits
<b>JUNIOR</b>			
ART 360	Painting Methods and Materials		4
ART 361	Figure Painting		4
<b>SENIOR</b>			
ART 460	Advanced Painting I	4C	4
ART 461	Advanced Painting II	4C	4



**College of Liberal Arts  
Department of Art and Art History  
Bachelor of Fine Arts  
Pottery Concentration**

**Effective Spring 2016**

**In addition to the Art (B.F.A.) core courses, the following must be completed:**

Code	Title	AUCC	Credits
<b>JUNIOR</b>			
ART 340	Pottery II		4
ART 341	Pottery III		4
<b>SENIOR</b>			
ART 435	Advanced Drawing I	4C	4
ART 436	Advanced Drawing II	4C	4
ART 440	Pottery IV	4C	4
ART 441	Pottery V	4C	4



**College of Liberal Arts  
Department of Art and Art History  
Bachelor of Fine Arts  
Printmaking Concentration**

**Effective Spring 2016**

**In addition to the Art (B.F.A.) core courses, the following must be completed:**

Code	Title	AUCC	Credits
<b>JUNIOR</b>			
ART 365	Printmaking II-Lithography		4
ART 366	Printmaking III-Studio Workshop		4
<b>SENIOR</b>			
ART 465	Printmaking IV-Studio Workshop	4C	4
ART 466	Printmaking V-Studio Workshop	4C	4

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**College of Liberal Arts  
Department of Art and Art History  
Bachelor of Fine Arts  
Sculpture Concentration**

**Effective Spring 2016**

In addition to the Art (B.F.A.) core courses, the following must be completed:

Code	Title	AUCC	Credits
<b>JUNIOR</b>			
ART 370	Sculpture II		4
ART 371	Sculpture III		4
<b>SENIOR</b>			
ART 470	Sculpture IV	4C	4
ART 471	Sculpture V	4C	4



**College of Liberal Arts  
LEAP Institute for Arts  
Master in Arts Leadership & Administration  
Master in Arts Leadership and Cultural Management, ~~Administration~~, Plan C**

**Effective Spring 2016**

<b>FIRST YEAR</b>			<b>CREDITS</b>
LEAP 500	Leadership in the Arts		3
LEAP 600	Arts Policy and Advocacy		3
LEAP 660	Arts Collaboration and the Community		3
LEAP 687	Internship		3
LEAP 692	Internship Seminar		1
Selected courses (see list below)			3
<b>Total Credits</b>			<b>16</b>

<b>SECOND YEAR</b>			
LEAP 650	Arts Events Management		3
LEAP 670	Law and the Arts		3
LEAP 687	Internship		3
LEAP 692	Internship Seminar		1
Selected courses (see list below)			6
<b>Total Credits</b>			<b>16</b>

**Program Total Credits: 32**

Code	Title	Credits
Select course(s) from the following list of courses in consultation with advisor and committee.		
ACT-600	Accounting for Managers	3



Code	Title	Credits
BUS 690H	Contemporary Issues: Mgmt Practices	4-6
BUS 695	Independent Study	1-18
CIS 600	Information Technology and Project Management	3
<u>BUS 500</u>	<u>Business Systems and Processes</u>	<u>2</u>
<u>BUS 614</u>	<u>Accounting Concepts</u>	<u>2</u>
<u>BUS 615</u>	<u>Managerial Accounting</u>	<u>2</u>
<u>BUS 620</u>	<u>Leadership and Teams</u>	<u>2</u>
<u>BUS 625</u>	<u>Organizational Communication</u>	<u>2</u>
<u>BUS 626</u>	<u>Managing Human Capital</u>	<u>2</u>
<u>BUS 655</u>	<u>Marketing Management</u>	<u>2</u>
<u>CIS 570</u>	<u>Business Intelligence</u>	<u>3</u>
<u>ECON 304</u>	<u>Intermediate Macroeconomics</u>	<u>3</u>
<u>ECON 376</u>	<u>Marxist Economic Thought</u>	<u>3</u>
EDOD 506	Human Resource Development	3
<u>EDOD 672</u>	<u>Change Facilitation</u>	<u>3</u>
EDOD 673	Plan and Implement Change Interventions	3
EDOD 675	Design, Develop, Implement Workplace Learning	3
EDOD 678	Assess Change Interventions	3
<u>EDRM 600</u>	<u>Introduction to Research Methods</u>	<u>3</u>
<u>EDRM 702</u>	<u>Foundations of Educational Research</u>	<u>3</u>
<u>EDUC 619</u>	<u>Curriculum Development</u>	<u>3</u>
EDUC 651	Multicultural and Special Populations	3
EDUC 670	Grant Writing	3
FIN 600	Financial Management Theory and Case Studies	3
<u>ETST 503</u>	<u>Contemporary Ethnic Studies Issues</u>	<u>3</u>
<u>FIN 601</u>	<u>Financial Management and Markets</u>	<u>3</u>
<u>HDFS 609</u>	<u>Prevention Program Evaluation</u>	<u>3</u>
<u>JTC 550</u>	<u>Public Relations</u>	<u>3</u>
<u>JTC 650</u>	<u>Strategic Communications</u>	<u>3</u>
LEAP 310	Creating and Managing a Career in the Arts	3
<u>MGT 340</u>	<u>Fundamentals of Entrepreneurship</u>	<u>3</u>
<u>MGT 360</u>	<u>Social and Sustainable Venturing</u>	<u>3</u>
MGT 420	New Venture Creation	3
MGT 440	New Venture Management	3
MGT 620	Management	3
MGT 679	Principles of Strategic Management	3
<u>MKT 479</u>	<u>Marketing Strategy and Management</u>	<u>3</u>

Code	Title	Credits
MKT 600	Marketing Management and Strategy	3
<u>MKT 621</u>	<u>Search Engine Marketing and Optimization</u>	<u>1</u>
<u>MKT 667</u>	<u>Services Marketing Management</u>	<u>1</u>
<u>PHIL 318</u>	<u>Aesthetics-Visual Arts</u>	<u>3</u>
<u>PHIL 348</u>	<u>Philosophy of Literature and the Arts</u>	<u>3</u>
<u>POLS 351</u>	<u>Public Administration</u>	<u>3</u>
<u>POLS 460</u>	<u>Public Policy Process</u>	<u>3</u>
<u>POLS 465</u>	<u>Public Policy Analysis</u>	<u>3</u>
<u>POLS 550</u>	<u>Advanced Public Administration</u>	<u>3</u>
<u>POLS 652</u>	<u>Public Organization Theory</u>	<u>3</u>
<u>POLS 665</u>	<u>Public Policy Analysis</u>	<u>3</u>
<u>SOC 302</u>	<u>Contemporary Sociological Theory</u>	<u>3</u>
<u>SOC 540</u>	<u>Community Sociology</u>	<u>3</u>
<u>SPCM 632</u>	<u>Theories of Interpersonal Communication</u>	<u>3</u>
<u>SPCM 633</u>	<u>Discourse, Work, and Organization</u>	<u>3</u>
<u>SPCM 634</u>	<u>Communication and Cultural Diversity</u>	<u>3</u>
<u>SPCM 639</u>	<u>Communication Theory</u>	<u>3</u>
<u>SPCM 647</u>	<u>Media Industries</u>	<u>3</u>
<u>SPCM 650</u>	<u>Contemporary Issues in Media</u>	<u>3</u>



The meeting adjourned at 4:30 p.m.

(FC) 11/20/15

Carole Makela, Chair  
Yvonne Bridgeman, Secretary

A regular meeting of the University Curriculum Committee was held on November 20, 2015, at 2:00 p.m.

Members present: Chair Carole Makela, Professors Bradley Goetz, Paul Mallette, Brad Reisfeld, Ed DeLosh, Sally Sutton, Howard Ramsdell, Beth Oehlerts, Kathleen Pickering (ex-officio).

Guests: Yvonne Bridgeman, Kelley Brundage, Linda Selkirk.

Absent: Mike Hogan, Undergraduate representative Tyler Siri, Graduate representative.

### **Minutes**

The Minutes of November 13, 2015 were approved.

### **Experimental Course Report**

The Experimental Course Report was received.

### **Consent Agenda**

The Consent Agenda was approved.

### **New Courses**

### ***Effective Date***

#### **CON 502 03(2-0-1). Research in Construction Management I. F.**

Fall 2016

Prerequisite: None.

Restriction: No Freshman, No Sophomore, No Junior.

Registration Information: Must register for lecture and recitation. Credit not allowed for both CON 502 and CON 562.

Research, discuss, and present current issues and trends in the construction industry related to business, management, engineering, and technology.

#### **CON 503 03(3-0-0). Research in Construction Management II. S.**

Spring 2017

Prerequisite: CON 502.

Restriction: No Freshman, No Sophomore, No Junior.

Registration Information: Credit not allowed for both CON 503 and CON 500.

Models and methods of disciplined inquiry used in diverse application-based organizations. Preparation to use disciplined inquiry methods to solve applied problems in construction management or related fields. Topics include problem/topic selection, writing research questions and objectives, literature reviews, selection of research methods, data collection and analysis, and conclusions and implications.

#### **CON 511 03(2-0-1). Project Procurement and Preconstruction. F.**

Fall 2016

Prerequisite: CON 461.

Restriction:

Registration Information: Must register for lecture and recitation. Credit now allowed for both CON 511 and CON 566. Required field trips.

Advanced project procurement procedures with a focus on early design phase planning applications and preconstruction management techniques.

#### **CON 512 03(2-0-1). Post-Award Construction Management. S.**

Spring 2017

Prerequisite: CON 461.

Restriction:

Registration Information: Must register for lecture and recitation. Credit not allowed for both CON 512 and CON 560.

Advanced topics related to post-award construction management issues with a focus on multiple project controls and project risk management.

**CON 521 03(2-0-1). Sustainable Building & Infrastructure Systems. S.**

Spring 2017

Prerequisite: None.

Restrictions: Graduate only.

Registration Information: Must register for lecture and recitation. Credit not allowed for both CON 521 and CON 576.

Issues and state-of-the-art resources needed to construct, remodel/retrofit, operate and maintain the built environment (buildings and infrastructure). Specifically, resources will include major materials, components and technologies, as well as energy and water resources needed in the different life-cycle phases of the building or infrastructure project.

**HDFS 410 03(3-0-0). Socioemotional Development in Childhood. F, S, SS.**

Fall 2016

Prerequisite: HDFS 310.

Restriction: Completion of 60 credits.

Registration information: Credit not allowed for both HDFS 410 and HDFS 351 or HDFS 401.

Sections may be offered: Online.

Socioemotional development in children and the influence of biology and socialization within diverse family, school and cultural contexts. Evidence-based practices for helping professionals who will serve children ages 3-8.

**HDFS 411 03(3-0-0). Developmental Transitions in Adolescence. F, S, SS.**

Fall 2016

Prerequisite: HDFS 311.

Restriction: Completion of 60 credits.

Registration Information: Sections may be offered: Online.

Examination of biological, socio-emotional, cognitive, and behavioral changes during adolescence.

**HDFS 412 03(3-0-0). Mental and Physical Health in Adulthood. F, S, SS.**

Fall 2016

Prerequisite: HDFS 312.

Restriction: Completion of 60 credits.

Registration Information: Sections may be offered: Online.

Mental and physical health of adults, contextual factors of development, and implications for prevention, intervention, and public health planning.

**HDFS 475 03(3-0-0). Entrepreneurs and Leaders in Human Services. F, S, SS.**

Fall 2016

Prerequisite: HDFS 375.

Restriction: Completion of 60 credits.

Registration Information: Sections may be offered: Online.

Skills and knowledge about leadership and entrepreneurship in areas pertinent to human development and family studies, as human services, non-profits, and other enterprises related to helping individuals, couples, and families.

**WS 270 03(3-0-0). Feminist Theory. F, S, SS.**

Fall 2016

Prerequisite: None.

Restriction:

Registration Information:

Contemporary feminist theories from multiple perspectives, including topics such as gender, race, sexuality, and oppression.

**Major Change to Courses**

**ANTH 444 043(3-20-0). Cultures of Virtual Worlds—Research Methods. F, Even years.**

Fall 2016

Prerequisite: ANTH 100 or ANTH 200.

Restriction: No Freshman, No Sophomore.

Registration Information: Must register for lecture and laboratory. Junior standing.

Methodologies and directed research related to virtual worlds and internet and gaming communities.

**ANTH 643 043(3-20-0). Advanced Ethnographic Field Methods. S, Odd years.**

Spring 2017

Prerequisite: None.

Restriction: Graduate only.

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

Mixed qualitative and quantitative Development of applied field methods to address practical real-world problems, and research questions for graduate-level ethnographic field research  
Applied, public, collaborative, participatory, and community-based ethnographic research.

**ATS 601 023(23-0-0). Atmospheric Dynamics I. F.**

Fall 2016

Prerequisite: MATH 261; MATH 530.

Restriction: Graduate only, Professional only.

Registration Information:

Equations of motion; earth's rotation; balanced motion; vorticity and Rossby waves; shallow water models; potential vorticity. Momentum, continuity equations; circulation, vorticity; thermodynamics; boundary layer; synoptic scale motions in midlatitudes.

**ATS 620 023(23-0-0). Thermodynamics and Cloud Physics. F.**

Fall 2016

Prerequisite: MATH 340; PH 142.

Restriction: Graduate only, Professional only.

Registration Information:

Equilibrium thermodynamics, cloud microphysics, cloud dynamics, precipitation formation, and cloud electrification.

**ATS 640 023(12-2-0). Synoptic Meteorology. F.**

Fall 2016

Prerequisite: ATS 601 or concurrent registration.

Restriction: Graduate only, Professional only.

Registration Information: Must register for lecture and laboratory.

Synoptic-scale weather systems; thermodynamic diagrams; moist and dry atmospheric variables; static stability; vertical motion; fronts; cyclones and anticyclones.

**ESS 542 024(24-0-0). Greenhouse Gas Policies. S.**

Fall 2016

Prerequisite: ESS 524.

Restriction: Graduate only.

Registration Information: Sections may be offered: Online.

Rules, regulations and standards for greenhouse gas management and accounting.

**HDFS/AHS 201 03(3-0-0). Perspectives in Gerontology. F, S.**

Fall 2016

Prerequisite: HDFS 101 or PSY 100 or SOC 100.

Restriction:

Registration Information: Sections may be offered: Online.

Multidisciplinary Using multidisciplinary perspectives on to explore a variety of issues in human aging; exploration of careers in gerontology; service-learning with older adults; emphasis on applied gerontology.

**PSY 441 01(0-2-0). Industrial Psychology Laboratory. F, S, SS.**

Summer 2016

Prerequisite: PSY 250; (STAT 301 or STAT 311)

Restriction:

Registration Information: Must have concurrent registration in PSY 440. Sections maybe offered: Online.

Hands-on experience with concepts such as job analysis, performance appraisals, interviews, and training, designed to supplement information provided in PSY 440. Laboratory and field experiences in job analysis, selection strategies, performance appraisal, and criterion development.

University Curriculum Committee

November 20, 2015

Page 4

The meeting adjourned at 3:35 p.m.

(D)

Carole Makela, Chair

Yvonne Bridgeman, Secretary

REVISED January 15, 2016

A regular meeting of the University Curriculum Committee was held on December 4, 2015, at 2:00 p.m.

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

Guests: Yvonne Bridgeman, Andrea Russo, Linda Selkirk.

Absent: Graduate representative, Vice Provost for Undergraduate Affairs.

### Minutes

The Minutes of November 20, 2015 were approved.

### Experimental Course Report

The Experimental Course Report was received.

### Consent Agenda

The Consent Agenda was approved.

### New Courses

### *Effective Date*

**CHEM 105 01(1-0-0). Problem Solving in General Chemistry.** F, S.

Fall 2016

Prerequisite: MATH 118 or MATH 141 or MATH 155 or MATH 160 or MATH 161 or MATH 229 or MATH 261.

Restriction:

Registration information:

Foundational problem-solving skills in general chemistry to support students for success in general chemistry courses.

**CHEM 651E Var.[1-4]. Special Topics in Chemistry: Materials Chemistry.** Every year, as needed.

Fall 2016

Prerequisite: None.

Restriction: Graduate only.

Registration Information: Written consent of instructor.

Discussion of current topics in materials chemistry.

**CHEM 651F Var.[1-4]. Special Topics in Chemistry: Chemical Biology.** Every year, as needed.

Fall 2016

Prerequisite: None.

Restriction: Graduate only.

Registration Information: Written consent of instructor.

Discussion of current topics in chemical biology.

**CHEM 651G Var.[1-4]. Special Topics in Chemistry: Chemistry Education.** Every year, as needed.

Fall 2016

Prerequisite: None.

Restriction: Graduate only.

Registration Information: Written consent of instructor.

Discussion of current topics in chemistry education.

**E 382A 03(1-0-2). Study Abroad: Reading and Writing the Zambia Experience.** SS.

Summer 2016

Prerequisite: Completion of AUCC Category 2.

Restriction:

Registration Information: Required field trips.

Community education and health initiatives in Livingstone, Zambia, in the context of fiction and nonfiction about such development work.

**ECE 395A Var.[1-6]. Independent Study. F, S, SS.**

Fall 2016

Prerequisite: None.

Restriction: Undergraduate only.

Registration Information: Contact department for registration. May be taken 6 times for credit for a maximum of 6 credits.

Development and implementation of a project in an electrical and computer engineering field of special interest under the supervision of a faculty member.

**ECE 395B Var.[1-6]. Independent Study: Open Option Project. F, S.**

Fall 2016

Prerequisite: None.

Restriction: Undergraduate only.

Registration Information: Contact department for registration. May be taken 6 times for credit for a maximum of 6 credits.

Students will work on an array of different electrical and computer engineering projects independently or under the guidance of industry mentors. Projects will be initiated by students or outside sources and will consist of small-scale service/outreach projects or market-driven projects that simulate a business environment.

**ECE 395C Var.[1-6]. Independent Study: Vertically Integrated Project. F, S.**

Fall 2016

Prerequisite: None.

Restriction: Undergraduate only.

Registration Information: Contact department for registration. May be taken 6 times for credit for a maximum of 6 credits.

Explore and develop comprehensive applications of electrical and computer engineering technologies as a member of a team, especially as they relate to active research areas of CSU faculty members.

**ECE 495A Var.[1-6]. Independent Study. F, S, SS.**

Fall 2016

Prerequisite: None.

Restriction: No Freshman, No Sophomore.

Registration Information: Contact department for registration. May be taken 6 times for credit for a maximum of 6 credits.

Development and implementation of a project in an electrical and computer engineering field of special interest under the supervision of a faculty member.

**ECE 495B Var.[1-6]. Independent Study: Open Option Project. F, S.**

Fall 2016

Prerequisite: None.

Restriction: No Freshman, No Sophomore, Undergraduate only.

Registration Information: Contact department for registration. May be taken 6 times for credit for a maximum of 6 credits.

Students will work on an array of different electrical and computer engineering projects independently or under the guidance of industry mentors. Projects will be initiated by students or outside sources and will consist of small-scale service/outreach projects or market-driven projects that simulate a business environment.

**ECE 495C Var.[1-6]. Independent Study: Vertically Integrated Projects. F, S.**

Fall 2016

Prerequisite: None.

Restriction: No Freshman, No Sophomore, Undergraduate only.

Registration Information: Contact department for registration. May be taken 6 times for credit for a maximum of 6 credits.

Explore and develop comprehensive applications of electrical and computer engineering technologies as a member of a team, especially as they relate to active research areas of CSU faculty members.



- ECE 511 03(3-0-0). Global Navigation Satellite System Receivers. F.** Fall 2016  
 Prerequisite: ECE 312 with a minimum grade of C; ECE 411, may be taken concurrently.  
 Restriction:  
 Registration Information:  
 Fundamentals of global navigation satellite systems (GNSS) receivers and software-based implementation of GNSS receiver functions.
- ECE 515 03(3-0-0). Satellite Navigation Systems Engineering. S.** Spring 2017  
 Prerequisite: CS 160 with a minimum grade of C; ECE 311 with a minimum grade of C; MATH 261 with a minimum grade of C; PH 142 with a minimum grade of C.  
 Restriction:  
 Registration Information:  
 Fundamentals of GPS, satellite orbits, ground monitoring and control, receiver systems, measurement errors and correction techniques, and PVT calculations.
- ERHS 505 01(1-0-0). Epidemiologic Research. F.** Fall 2016  
 Prerequisite: ERHS 532 or concurrent registration.  
 Restriction: Graduate only.  
 Registration Information:  
 Professional skills and knowledge regarding topics in the epidemiologic research process.
- FW 578 03(2-0-1). Conservation Decision Analysis. S.** Spring 2017  
 Prerequisite: (MATH 155 or MATH 160) and STAT 301.  
 Restriction: Graduate only.  
 Registration Information: Offered as an online course only. Written consent of instructor.  
 Admission to a graduate program in Fish, Wildlife and Conservation Biology.  
 Identifying decision making processes and adaptive management techniques used in conservation; consideration of objectives, options and outcomes.
- HIST 436A 02(2-0-1). The Land of Israel—Past and Present: Study Abroad—Pre & Post Travel Study. S.** Spring 2017  
 Prerequisite: Three credits of HIST.  
 Restriction:  
 Registration Information: Required field trips. Written consent of instructor. Must register for lecture and recitation.  
 Physical geography, material culture, history of Israel: ancient, medieval, and modern.
- HIST 436B 01(0-0-1). The Land of Israel—Past and Present: Study Abroad. S.** Spring 2017  
 Prerequisite: Three credits of HIST.  
 Restriction:  
 Registration Information: Written consent of instructor. Required field trips.  
 Physical geography, material culture, history of Israel: ancient, medieval, and modern.
- MATH 271 04(4-0-0). Applied Mathematics for Chemists I. F.** Fall 2016  
 Prerequisite: MATH 155 or MATH 159 or MATH 160.  
 Restriction:  
 Registration Information:  
 Series and limits, Taylor series, complex variables, first- and second- order ordinary differential equations, matrices, linear transformations, determinants, and eigenvalues.
- MATH 272 04(4-0-0). Applied Mathematics for Chemists II. S.** Spring 2017  
 Prerequisite: MATH 271.  
 Restriction:  
 Registration Information:  
 Vector fields, partial differentiation, cylindrical and spherical coordinates, multiple integrals, line integrals, the Wave and the Schrödinger equations, separation of variables method. Inner Product Spaces. Fourier Series.

**Major Change to Courses**

**GEOL ~~572672~~ 043(32-3-0). Advanced Structural Geology.** F. Fall 2016

Prerequisite: GEOL 436 or graduate standing in Geosciences.

Restriction: No Freshman, No Sophomore, No Junior.

Registration Information: Must register for lecture and laboratory. Required field trips.

Rheology, deformation mechanisms, structural associations and advanced methods of structural analysis.

**JTC 210 03(3-0-0). Newswriting.** F, S, SS. Spring 2016

Prerequisite: None.

Restriction:

Registration Information: Credit not allowed for both JTC 210 and JTC 192. Sections may be offered: Online.

Theory and practice in newswriting.

**MECH 529 03(3-0-0). Advanced Mechanical Systems.** ~~F S, odd years only.~~ Fall 2016

Prerequisite: MECH 307.

Restriction: No Freshman, No Sophomore.

Registration Information: Sections may be offered: Online.

Modeling, analysis, and synthesis of practical mechanical devices in which dynamic response is dominant consideration.

The meeting adjourned at 4:15 p.m.

(FC) 12/11/15

Carole Makela, Chair  
Yvonne Bridgeman, Secretary

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University Curriculum Committee  
December 4, 2015  
**CONSENT AGENDA**

**Minor Change to Courses**

		REQUESTED CHANGE	EFFECTIVE DATE
MATH 430	Fourier Wavelet Analysis with Apps	MATH <del>340</del> or Math 345	Spring 2017
PH 141	Physics for Scientists and Engineers I	(MATH 126, or concurrently) AND (MATH155, or concurrently) OR (MATH160, or concurrently) <u>OR</u> (MATH 159, or concurrently)	Fall 2016
PH 142	Physics for Scientists and Engineers II	(PH 141) and (MATH 161, may be taken concurrently; or MATH 255, may be taken concurrently; <u>or</u> MATH 271, may be taken concurrently)	Fall 2016
SOCR 350	Soil Fertility Management	(CHEM 107; CHEM 108 or CHEM 111; CHEM 112); SOCR 240	Fall 2016
STAT 315	Statistics for Engineers and Scientists	MATH <del>160 464</del> or MATH <del>155 255</del>	Fall 2016

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University Curriculum Committee  
December 4, 2015  
***EXPERIMENTAL COURSE REPORT***

<b>COURSE</b>	<b>TITLE</b>	<b>TERM</b>	<b>1<sup>st</sup>/2<sup>nd</sup> OFFERING</b>	<b>REQUEST DATE</b>
BMS 680A2	Applied Andrology	Spring 2016	1 <sup>st</sup>	11/23/15
FSHN 580A1	Research Methods—Food Science Human Nutrition	Spring 2016	1 <sup>st</sup>	11/16/15
FSHN 580A2	Responsible Conduct of Research	Spring 2016	1 <sup>st</sup>	11/5/15
GEOL 581A4	Petrophysics and Well Log Interpretation	Spring 2016	1 <sup>st</sup>	11/18/15
HES 280A1	Theory of Health Behavior	Spring 2016	1 <sup>st</sup>	10/21/15
HORT 581A3	Metabolomics: Detection and Data Analysis	Spring 2016	1 <sup>st</sup>	11/2/15
IU 381A3	Leadership ‘On the Court’ I	Spring 2016	2 <sup>nd</sup>	11/24/15
WS 380A2	Feminist Friendship	Spring 2016	1 <sup>st</sup>	11/4/15

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A regular meeting of the University Curriculum Committee was held on December 11, 2015, at 2:00 p.m.

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

Guests: Yvonne Bridgeman, Kelley Brundage, Linda Selkirk.

Absent: Vice Provost for Undergraduate Affairs.

### **Minutes**

The Minutes of December 4, 2015 were approved.

### **Experimental Course Report**

The Experimental Course Report was received.

### **Consent Agenda**

The Consent Agenda was approved.

### **Request for Third Offering of Experimental Course**

The request to offer IU 181A3 Foundations of Sports Management as an experimental course in Spring 2016 for the third time was approved, with a change in credits from 1 to 2.

### **New Courses**

### ***Effective Date***

#### **IE 300 03(3-0-0). Global Studies. F, S.**

Fall 2016

Prerequisite: None.

Restriction:

Registration Information:

Traditional and changing institutions, systems, values and identities in selected cultures and how they are perceived, portrayed, and experienced.

#### **LAND 200 03(3-0-0). Topics in Landscape Theory and Garden Design. F, S, SS.**

Spring 2016

Prerequisite: None.

Restriction:

Registration Information: This is a partial semester course. Offered as an online course only.

Landscape theory and design principles in garden design. Students will be engaged through online discussions and will record weekly exercises and course material with the development of a sketchbook and blog/website postings.

#### **SOC 334 03(3-0-0). Sociology of Intersectionality. F.**

Fall 2016

Prerequisite: SOC 100 or SOC 105.

Restriction:

Registration Information:

Multiple and intersecting ways race, class, gender, and sexuality shape society, individual life-chances, and daily social interactions.

#### **SOC 344 03(3-0-0). Health, Medicine, and Society. F.**

Fall 2016

Prerequisite: SOC 100 or SOC 105.

Restriction:

Registration Information:

The impact of sociocultural factors like social class, gender, and race/ethnicity on health and illness in society and the social organization of healthcare delivery. The US health care system.

**Major Change to Courses**

- BIOM 574 03(3-0-0). Bio-Inspired Surfaces. S.** Spring 2016  
Prerequisite: MECH 342; CHEM 111.  
Restriction:  
Registration Information: Credit not allowed for both BIOM 574 and MECH 574. Sections may be offered: Online.  
Analysis of surface functionalities of various biological species; identification of design principles.
- ECE 501/ENGR 501. 03(3-0-0). Foundations of Systems Engineering. F, S.** Fall 2016  
Prerequisite: None.  
Restriction:  
Registration Information: Sections may be offered: Online.  
Functional components of systems engineering, application of systems engineering to practical problems, system life-cycle process.
- IE 272 03 4-3(3-0-0). World Interdependence – Current Global Issues. F.** Fall 2016  
Prerequisite: None.  
Restriction:  
Registration Information:  
A global perspective focusing on an international topic receiving current media coverage.  
~~Current global issues, using guest speakers and focusing on global/international topics in the news.~~
- MU 150 01 02(20-2-0). Piano Class I. F, S, SS.** Fall 2016  
Prerequisite: None.  
Restriction:  
Registration Information: Required of all Bachelor of Music majors, except those in the piano or organ performance option. May test out if adequate keyboard skills. For nonmusic majors and majors needing basic skills.  
Basic piano technique; keyboard harmony and music rudiments.
- MU 286 03-04(1-0-4). Practicum-Introduction to Music Education. F-S.** Fall 2016  
Prerequisite: None.  
Restriction:  
Registration Information: Must register for lecture and recitation.
- TH 192 03 4-18(0-0-3). Theatre Freshman Seminar. F S, SS.** Fall 2016  
Prerequisite: None.  
Restriction: Theatre Majors Only.  
Registration Information:  
Collaborative creative processes required to transfer storytelling and self-scripting literature to theatrical performances with faculty artists/scholars.
- TH 250 03 02(20-2-0). Voice and Movement Speech for the Stage. S.** Fall 2016  
Prerequisite: TH 251 or concurrent registration.  
Restriction: Theatre Majors Only.  
Registration Information: Must register for lecture and laboratory.  
Broad survey of traditional Linklater and topical Skinner approaches to voice and movement speech for the theatre actor.

**New Programs**

**College of Natural Sciences  
Department of Statistics  
Graduate Certificate in Data Analysis**

**Effective Spring 2016**

Required Courses:

<u>STAT 511</u>	Design and Data Analysis for Researchers I	4
<u>STAT 512</u>	Design and Data Analysis for Researchers II	4

Select a minimum of two credits from the following:

<u>STAT 547</u>	Statistics for Environmental Monitoring	3
<u>STAA 552</u>	Generalized Regression Models	2
<u>STAA 565</u>	Quantitative Reasoning	1
<u>STAA 566</u>	Computational and Graphical Methods	1
<u>STAA 568</u>	Topics Industrial/Organizational Statistics	1
<u>STAA 572</u>	Nonparametric Methods	2
<u>STAA 573</u>	Analysis of Time Series	2

Program Total Credits 10-11

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.



**College of Business  
Department of Finance & Real Estate  
BS in Business Administration  
Financial Planning Concentration**

**Effective Spring 2016**

**Freshman**

	<b>AUCC Credits</b>
<u>BUS 100</u> Introduction to Business	1
<u>BUS 150</u> Business Computing Concepts and Applications	3
<u>BUS 220</u> <sup>1</sup> Ethics in Contemporary Organizations (GT-AH3)	3B 3
<u>CIS 200</u> Business Information Systems	3
<u>CO 150</u> College Composition (GT-CO2)	1A 3
<u>ECON 202</u> Principles of Microeconomics (GT-SS1)	3C 3
<u>MATH 141</u> Calculus in Management Sciences (GT-MA1)	1B 3
<u>Biological and Physical Sciences</u>	3A 4
<u>Arts and Humanities</u>	3B 3
<u>Electives</u>	5
<b>Total Credits</b>	<b>31</b>

**Sophomore**

<u>ACT 210</u> Introduction to Financial Accounting	3
<u>ACT 220</u> Introduction to Managerial Accounting	3
<u>BUS 201</u> <sup>1</sup> Foundations of Sustainable Enterprise	1
<u>BUS 260</u> Social-Ethical-Regulatory Issues in Business	3
<u>BUS 300</u> Business Writing and Communication (GT-CO3)	2 3

<u>ECON 204</u> Principles of Macroeconomics (GT-SS1)	3C	3
<u>STAT 204</u> Statistics for Business Students		3
<u>Biological and Physical Sciences</u>	3A	3
<u>Global and Cultural Awareness</u>	3E	3
Electives		6
Total Credits		31

**Junior**

<u>ACT 330</u> Introduction to Taxation		3
<u>FIN 300</u> <sup>2</sup> Principles of Finance	4A,4B	3
<u>FIN 310</u> Financial Markets and Institutions		3
<u>FIN 320</u> Introduction to Financial Planning		3
<u>FIN 342</u> Risk Management and Insurance		3
<u>FIN 355</u> Principles of Investments		3
<u>MKT 300</u> <sup>2</sup> Marketing	4B	3
<u>Historical Perspectives</u>	3D	3
Electives		6
Total Credits		30

**Senior**

<u>BUS 479</u> Strategic Management	4A,4C	3
<u>FIN 440</u> Estate Planning		3
<u>FIN 442</u> Employee Benefits and Retirement Planning		3
<u>FIN 445</u> Financial Plan Development		3
<u>MGT 301</u> Supply Chain Management		3
<u>MGT 320</u> Contemporary Management Principles/Practices		3
Electives <sup>3</sup>		10
Total Credits		28
Program Total Credits:		120

<sup>1</sup> Students enrolled in the Business Administration major prior to Fall semester 2013, are not required to take BUS 201 and BUS 220.

<sup>2</sup> Students who have taken FIN 305 and/or MKT 305 prior to admission to the College of Business may substitute those courses to satisfy the category 4A and 4B requirements. All other students are required to take FIN 300 and MKT 300 to satisfy categories 4A and 4B.

<sup>3</sup> 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).

Students are not to utilize the satisfactory/unsatisfactory (S/U) grading option for any Business concentration course (Business and non-Business subject codes) except when a course only allows S/U grading.





### Major Change to Curricula

**Warner College of Natural Resources  
 Department of Forest & Rangeland Stewardship  
 Master of Natural Resource Stewardship, Plan C  
 Ecological Restoration Specialization**

**Effective Fall 2016**

#### Core Courses

Select one course from the following:

<u>F 520</u>	Advanced Quantitative Methods in Forestry I	3
<u>NR 566</u>	Natural Resource Inventory and Data Analysis	3
<u>RS 532</u>	Rangeland Ecosystem Sampling	3
<u>NR 444</u>	Fire Economics and Policy	3
or <u>NR 568</u>	Economics of Forests, Restoration and Fire	
<u>NR 565</u>	Principles of Natural Resources Ecology	3
or <u>NR 578</u>	Ecology of Disturbed Lands	
<u>NR 567</u>	Analysis of Environmental Impact	3
<u>NR 693</u>	Natural Resources Stewardship Seminar	2

#### Ecological Restoration Specialization

Select a minimum 9 credits from the following:

<u>BSPM 551</u>	Advanced Integrated Pest Management	4
<u>BSPM 556</u>	Biological Control of Plant Pests	3
<u>BZ 572</u>	Phytoremediation	3
<u>CIVE 613</u>	River Restoration Design	3
<u>ECOL 505</u>	Foundations of Ecology	2
<u>ESS 575</u>	Models for Ecological Data	4
<u>ESS 660</u>	Biogeochemical Cycling in Ecosystems	3
<u>NR 552</u>	Ecology of Military Lands	3
<u>NR 577</u>	<u>Wetland Ecology and Restoration</u>	<u>3</u>
<u>NR 678</u>	Advanced Ecological Restoration	4
<u>SOCR 567</u>	Environmental Soil Chemistry	4

Electives <sup>1</sup> 7

Program Total Credits 30

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

<sup>1</sup> Select courses with approval of advisor and graduate committee.



The meeting adjourned at 3:15 p.m.

(D)

Carole Makela, Chair  
 Yvonne Bridgeman, Secretary

University Curriculum Committee  
 December 11, 2015  
**CONSENT AGENDA**

<b>Course Drops</b>		<b>REQUESTED CHANGE</b>	<b>EFFECTIVE DATE</b>
ETST 475	Indigenous Film and Video	DROP	Fall 2016
ECE 501	Foundations of Systems Engineering	DROP	Fall 2016
<b>Minor Change to Courses</b>		<b>REQUESTED CHANGE</b>	<b>EFFECTIVE DATE</b>
D 226	Dance Choreography I	Offering term: <u>Spring</u> <del>Fall</del>	Fall 2016
E 422/ ETST 422	African-American Literature	Prerequisite: <u>3 credits</u> <u>of AUCC 3B or AUCC</u> <u>3E, CO-150 and E-270.</u>	Fall 2016
LFRE 433A	Advanced French/Francophone Culture: Representations	Offering year: <u>Odd</u> <del>Every</del>	Spring 2016
LFRE 433B	Advanced French/Francophone Culture: Center and Margins	Offering year: <u>Even</u> <del>Every</del>	Spring 2016
MU 151	Piano Skills for Music Educators	Prerequisite: <u>MU 150</u>	Fall 2016
MU 153	Piano Skills for Music Therapists	Offering Term: <u>Fall</u> <del>Fall, Spring</del> Prerequisite: <u>MU 150</u>	Fall 2016
MU 154	Jazz Piano Class	Prerequisite: <u>MU 150;</u> <u>MU 255</u>	Fall 2016
MU 254	Beginning Conducting	Offering term: <u>Fall</u> <del>Spring</del>	Fall 2016
SOC 313	Computer Methods in Sociology	Prerequisite: (SOC 210) <u>or (STAT 2XX or</u> <u>above)</u>	Summer 2016
STAT 400	Statistical Computing	Prerequisite: <u>STAT 420</u> <u>or concurrent</u> <u>registration; CS 160 or</u> <u>CS 163 or CS 164 or</u> <u>(MATH 151 and</u> <u>MATH 153) and</u> <u>(STAT 372)</u>	Fall 2016
TH 241	Text Analysis for the Theatre	Prerequisite: <del>TH 475</del> <u>and TH 150 or TH 160</u>	Fall 2016
TH 324	Teaching Creative Drama for Children	Prerequisite: <u>TH 251 or</u> <u>TH 255</u>	Fall 2016

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TH 375 Playwright's Workshop

Prerequisite: TH 241  
~~275~~; TH 343

Fall 2016

University Curriculum Committee  
December 11, 2015  
***EXPERIMENTAL COURSE REPORT***

<b>COURSE</b>	<b>TITLE</b>	<b>TERM</b>	<b>1<sup>st</sup>/2<sup>nd</sup> OFFERING</b>	<b>REQUEST DATE</b>
ANeq 580A3	Marker- and Gene-Assisted Selection	Spring 2016	1 <sup>st</sup>	11/30/15
ANeq 580A4	Markers to Gene Function— Functional Change	Spring 2016	1 <sup>st</sup>	11/30/15
ANTH 180A1	Human Origins and Variation	Spring 2016	1 <sup>st</sup>	11/23/15
IU 181A3	Foundations of Sports Management	Spring 2016	3 <sup>rd</sup>	12/9/15

**MEMORANDUM**

December 3, 2015

To: University Curriculum Committees

From: Albert Bimper, Assistant Prof.  
Director of Denver Broncos Sports Management Institute

RE: Third request for experimental course

The experimental course with the general title of Foundations of Sports Management was initially created with the intent to develop an introductory course to study industries of sport. The course has been offered twice, in Spring 2015 and Fall 2015, at the 100-level (IU181). For both offerings, the course was delivered via online. The primarily content in the initial offering included recorded interviews for purposes of discussion that were submitted by practitioners in various sports industries and including minimal lecture and readings. Based on my review of the course and student feedback, this approach did not adequately fulfill the course purposes as well as the needs for this student population. After significant revision, I offered the course a second time with more comprehensive content and practical learning activities suitable for this population of students, which I would like to try one more time as a 2 credit experimental course.

The next course offering will include a new textbook with updated content material, more comprehensive information and case studies for students to critically problem solve. I intend to make an official new course request subsequent to student performance and course evaluations that reflect a quality learning experience aligned with the course purposes and objectives.

**Albert Y. Bimper, Jr., PhD.**

Assistant Professor

Senior Associate Athletics Director

Director, The Denver Broncos Sports Management Institute

Colorado State University

Campus Delivery - 1790

Ft. Collins, CO 80523-1790

E-Mail: [Albert.Bimper@colostate.edu](mailto:Albert.Bimper@colostate.edu)

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

Members present: Chair Carole Makela, Professors Tiare Santistevan substitute for Bradley Goetz, Paul Mallette, Brad Reisfeld, Mike Hogan, Ed DeLosh, Sally Sutton, Howard Ramsdell, Beth Oehlerts, Interim Vice Provost for Undergraduate Affairs David Gilkey.

Guests: Yvonne Bridgeman, Kelley Brundage, Linda Selkirk.

Absent: Graduate representative Allistair Cook, Undergraduate representative Tyler Siri

### **Minutes**

The Minutes of December 11, 2015 were approved. Corrected Minutes from December 4, 2015 were approved.

### **Experimental Course Report**

There was no Experimental Course Report.

### **Consent Agenda**

The Consent Agenda was approved with one change.

### **New Courses**

### ***Effective Date***

#### **ACT 211 01(1-0-0). Accounting Professional Skills. F, S.**

Spring 2017

Prerequisite: ACT 210.

Restriction:

Registration Information:

Survey of accounting profession career options, certifications, and professional skills.

#### **ANEQ 293 01(1-0-0). Animal Science Career Exploration Seminar. F, S.**

Fall 2016

Prerequisite: ANEQ 101.

Restriction: No Freshman. Undergraduate Only.

Registration Information: This is a partial-semester course.

Better understanding of individual abilities, strengths and passions is imperative to be successful in a career search as well as to succeeding in life. Designed to help a student explore who they are individually, how they might fit into a career or graduate programs in animal agriculture as well as how to prepare marketing materials to be competitive in selection processes.

#### **ANEQ 450 03(2-3-0). Processed Meats. F.**

Fall 2016

Prerequisite: ANEQ 360.

Restriction: No Freshman.

Registration Information: Must register for lecture and laboratory.

Physical, chemical and functional characteristics of meat raw materials. Science and technology of value-added processing including curing, sausage manufacture, low moisture products, and restructuring. Quality assurance and related current industry topics.

#### **ECE 647 03(3-0-0). Synchrotron Rad, FELs and Hard X-Ray Optics. F (odd years).**

Fall 2017

Prerequisite: (ECE 341 with a C or better) or (ECE 342 with a C or better) or (PH 351 with a C or better).

Restriction:

Registration Information: Sections may be offered: Online.

Advanced concepts in particle beam accelerator technology and engineering, linear accelerators and principles of intense pulsed electron ion beams.

**ERHS 507A 01(1-0-0). Toxicology Toolbox: Fundamentals. F.**

Fall 2016

Prerequisite: (ERHS 466 or concurrent registration) or (ERHS 448 or concurrent registration) or (ERHS 502 or concurrent registration).

Restriction:

Registration Information:

Qualitative description of toxicant molecules relevant to their behavior in biological systems and the environment. Quantitative characterization of toxicant concentrations (dose) and how they change with time (toxicokinetics).

**ERHS 535 03(2-2-0). R Programming for Research. F.**

Fall 2016

Prerequisite: None.

Restriction: Graduate Only.

Registration Information: Must register for lecture and laboratory. Until one week prior to the first day of classes, enrollment is restricted to students enrolled in the Epidemiology specialization of the Environmental Health degree or a graduate degree program in Statistics or the Master of Applied Statistics program. Thereafter, enrollment is open to any student enrolled in a graduate degree program.

In-depth instruction on data collection, data management, programming, and visualization, using data examples relevant to academic research. Taught using the statistical programming language R, but the principals will be translatable to other programming languages (e.g., Python, Matlab, SAS). Conducting reproducible research in R and how to construct custom functions and bundle these in a shareable R package.

**ESS 655 02(2-0-0). Multivariate Analysis for Community Ecology. F (even years).**

Fall 2016

Prerequisite: STAT 511 and (ECOL 500-679 or ESS 500-679 or FW 500-679 or BZ 500-679 - at least 3 credits).

Restriction:

Registration Information:

Techniques and conceptual understanding for analyzing multivariate ecological data characteristic of community ecology, including ordination, classification, and permanova.

**FW 692 Var. [1-18]. Seminar: Fish, Wildlife, and Conservation Bio. F, S, SS.**

Fall 2016

Prerequisite: None.

Restriction: Graduate Only. Professional Only.

Registration Information: Sections may be offered: Online.

**MIP 766 01(0-0-1). Cytopathology—Clinical Pathology. S.**

Spring 2017

Prerequisite: MIP 786A; MIP 786B; MIP 786C.

Restriction: Graduate Only. Professional Only.

Registration Information: Written consent of instructor.

Discussion of cytology cases that are diagnostically challenging, medically interesting, or classic case examples. Discussions and microscopic reviews of the cases will be lead by a clinical pathologist.

**NRRT 425 03(3-0-0). Communication for Tourism. F, S, SS.**

Fall 2016

Prerequisite: NRRT 372.

Restriction: No Freshman. No Sophomore.

Registration Information:

Exploration and practical application of communication theories, concepts, and techniques for successful communication in the context of tourism industry practice.

**SPCM 712 03(0-0-6). Critical/Cultural Analysis in Communication. F (odd years).**

Fall 2016

Prerequisite: None.

Restriction: Graduate Only.

Registration Information:

Advanced instruction in critical/cultural analysis as understood by the field of Communication Studies.

**Major Change to Courses**

**ACT 311 ~~043~~(3-0-1). Intermediate Accounting I. F, S, SS.**

Fall 2016

Prerequisite: (ACT 205 with a minimum grade of B- or ACT 210 with a minimum grade of B-) and (ACT 220 with a minimum grade of B-).

Restriction:

Registration Information: Credit not allowed for both ACT 311 and ACT 310.

Preparation and analysis of financial statements under US generally accepted accounting principles (GAAP); accounting for revenue and assets. ~~Asset and liability accounting.~~

**ANEQ ~~420520~~ 03(3-0-0). Applied ~~Comparative~~ Nutrition—~~Computer Diet Formulation.~~ F**  
(even years).

Fall 2016

Prerequisite: ANEQ 320 or ANEQ 345 FSHN 550; FSHN 551.

Restriction: No Freshman. No Sophomore.

Registration Information:

Comparative diet formulation digestion strategies for cattle (beef and dairy), equine, swine, and poultry, mechanisms of nutrient utilization for terrestrial vertebrates: Utilizing advanced computer software to formulate diets, predict performance, and manage ingredient inventory, livestock, pets, wildlife, and zoo animal models.

**ANTH 373 03(3-0-0). Human Evolution. F, S, SS.**

Fall 2016

Prerequisite: ANTH 120 or BZ 110.

Restriction:

Registration Information: Sections may be offered: Online.

Current topics and debates in human evolution concentrating on biocultural changes in the human lineage.

**ANTH 545 ~~043~~(3-2-0). Global Mental Health—~~Theory and Method.~~ F (odd years).**

Fall 2017

Prerequisite: None.

Restriction: Graduate Only.

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

Undergraduates must have written consent of instructor.

Cross-cultural study of mental health and healing; cultural, clinical, and biological ~~neurological~~ perspectives; integration of theory and method.

**BUS 220 03(3-0-0). Ethics in Contemporary Organizations. F, S, SS.**

Summer 2016

Prerequisite: None.

Restriction:

Registration Information: Sections may be offered: Online.

Examination and application of the ethical principles that are fundamental to managing a successful high-integrity business or organization.

**FW 696B Var. [1-18]. Group Study: Fish, Wildlife, Conserv Biology ~~Wildlife Biology.~~ F, S, SS.**

Fall 2016

Prerequisite: None.

Restriction: Graduate Only. Professional Only.

Registration Information: Written consent of instructor. Sections may be offered: Online.

Group study projects on topics in fish, wildlife, and conservation biology ~~Wildlife Biology.~~

**GES 520 03(3-0-0). Issues in Global Environmental Sustainability. F, S.**

Fall 2016

Prerequisite: None.

Restriction: Graduate Only. Professional Only.

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

Analysis of the different major dimensions/definitions of sustainability in current issues involving environmental, social and economic systems.

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**New Programs**

**College of Business  
Department of Marketing  
Undergraduate Certificate in Customer Experience Management**

**Effective Summer 2016**

Additional coursework may be required due to prerequisites.

Code	Title	Credits
<u>MKT 366</u>	Services Marketing	3
<u>MKT 370</u>	Digital Marketing	3
<u>MKT 360</u> or <u>MKT 367</u>	Retailing Sports Marketing	3
<b>Program Total Credits</b>		<b>9</b>



**College of Business  
Department of Marketing  
Undergraduate Certificate in Marketing Communication and Branding**

**Effective Summer 2016**

Additional coursework may be required due to prerequisites.

Code	Title	Credits
<u>MKT 320</u>	Integrated Marketing Communications	3
<u>MKT 315</u>	Marketing Communication Design	3
<u>MKT 370</u>	Digital Marketing	3
<b>Program Total Credits</b>		<b>9</b>



**College of Business  
Department of Marketing  
Undergraduate Certificate in Strategic Marketing**

**Effective Spring 2016**

Additional coursework may be required due to prerequisites.

Code	Title	Credits
Select three courses from the following:		
<u>MKT 320</u>	Integrated Marketing Communications	3
<u>MKT 330</u>	Business Customer Relationships	3
<u>MKT 440</u>	Pricing and Financial Analysis in Marketing	3
<u>MKT 364</u>	Product Development and Management	3
<b>Program Total Credits</b>		<b>9</b>



The meeting adjourned at 4:25 p.m.

(FC) 1/22/16

Carole Makela, Chair  
Yvonne Bridgeman, Secretary



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University Curriculum Committee  
January 15, 2016

**CONSENT AGENDA**

	<b>Course Drops</b>	<b>REQUESTED CHANGE</b>	<b>EFFECTIVE DATE</b>
<u>ACT 310</u>	Financial Statement Analysis	DROP	Fall 2016
<u>ACT 421</u>	Management Control Systems	DROP	Fall 2016
<u>ACT 442</u>	International Accounting	DROP	Fall 2016
<u>ACT 511</u>	Advanced Accounting I	DROP	Fall 2016
<u>FW 692A</u>	Seminar: Fishery Biology	DROP	Fall 2016
<u>FW 696A</u>	Group Study: Fishery Biology	DROP	Fall 2016
	<b>Minor Change to Courses</b>		
<u>ANEQ 322</u>	Pet Nutrition	REQUESTED CHANGE Prerequisite: ANEQ 320 <del>or</del> and ANEQ 345 <del>or</del> and FSHN 350	EFFECTIVE DATE Fall 2016
<u>ANEQ 522</u>	Animal Metabolism  *REMOVED FROM CONSENT AGENDA FOR OTHER CONSIDERATION	<del>Prerequisite: ANEQ 320 or ANEQ 345; CHEM 346 or CHEM 245 and CHEM 246</del>	<del>Fall 2016</del>
<u>BUS 601</u>	Quantitative Business Analysis	BUS 500 <del>or</del> <del>concurrent</del> <del>registration. BUS 601</del> <del>to 665--at least 1</del> <del>course taken after</del>	Spring 2016
<u>LGER 301</u>	Oral Communication-German	Offering Term: <del>Fall</del> Spring	Spring 2016
<u>LGER 434</u>	Advanced German Culture	Offering Term: Fall ; Spring Prerequisite: LGER 355 <del>or</del> LGER 366	Spring 2016
<u>LSPA 300</u>	Reading and Writing for Communication- Spanish	Offering Term: <del>Fall</del> Spring Every Prerequisite: LSPA 201 <del>or</del> LSPA 230	Spring 2016

SOC 403 Capstone Seminar

Prerequisite: (SOC 210 or (STAT 2\*\* or above) SOC 2\*\*) and (SOC 301 or SOC 302) and SOC 311 and (SOC 313 or CS 110) Fall 2016

SOC 487 Internship

Prerequisite: (SOC 210 or (STAT 2\*\* or above) SOC 2\*\*) and (SOC 301 or SOC 302) and SOC 311 and (SOC 313 or CS 110) Fall 2016

SOC 492 Seminar

Prerequisite: (SOC 210 or (STAT 2\*\* or above) SOC 2\*\*) and (SOC 301 or SOC 302) and SOC 311 and (SOC 313 or CS 110) Fall 2016

A regular meeting of the University Curriculum Committee was held on January 22, 2016, at 2:00 p.m.

Members present: Chair Carole Makela, Professors Bradley Goetz, Paul Mallette, Brad Reisfeld, Mike Hogan, Ed DeLosh, Sally Sutton, Howard Ramsdell, Beth Oehlerts, Interim Vice Provost for Undergraduate Affairs David Gilkey, Graduate representative Allistair Cook, Undergraduate representative Tyler Siri.

Guests: Yvonne Bridgeman, Kelley Brundage, Sandra Quackenbush.

Absent:

### **Minutes**

The Minutes of January 15, 2016 were approved.

### **Experimental Course Report**

There was no Experimental Course Report.

### **Consent Agenda**

There was no Consent Agenda, January 1/22/16.

### **New Courses**

### ***Effective Date***

**ANEQ 626 04(3-1-0). Animal Nutrition, Emissions, and Management.** F, S.

Fall 2016

Prerequisite: None.

Restriction: Graduate Only.

Registration Information: Must register for lecture and laboratory. Required field trips.

Nutrients and nutrient function required to support animal life through all physiological states and assessment of the impacts on gaseous emissions from these animals.

**ANTH 454 03(3-0-0). Anthropological Perspectives on Food.** F.

Fall 2016

Prerequisite: Two courses ANTH 100, ANTH 120, ANTH 140, or ANTH 200.

Restriction: No Freshman. No Sophomore. Undergraduate only.

Registration Information: Junior standing.

A long term perspective on the political economy of human food ways from ancient hunter-gatherers to the present. Topics will include foraging practices, domestication, feasting and emergent social complexity, the role of food in ancient states, and globalization, as well as the modern food economy. Lectures and readings will be based on research in archaeology, cultural anthropology, and biological anthropology.

**ESS 698 Var. [1-18]. Research.** F, S, SS.

Fall 2016

Prerequisite: None.

Restriction: Graduate Only.

Registration Information: Written consent of advisor.

**ESS 699 Var. [1-18]. Thesis.** F, S, SS.

Fall 2016

Prerequisite: None.

Restriction: Graduate Only.

Registration Information: Written consent of advisor.

**ESS 798 Var. [1-18]. Research.** F, S, SS.

Fall 2016

Prerequisite: None.

Restriction: Graduate Only.

Registration Information: Written consent of advisor.

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**ESS 799 Var. [1-18]. Dissertation. F, S, SS.**

Fall 2016

Prerequisite: None.

Restriction: Graduate Only.

Registration Information: Written consent of advisor.

**MIP 767 03(3-0-0). Advanced General Pathology. F.**

Fall 2016

Prerequisite: None.

Restriction: Graduate Only. Professional Only.

Registration Information:

In-depth, detailed study of general pathology and molecular mechanisms of disease. Help prepare students in the Anatomic and/or Clinical Pathology Residency prepare for the ACVP Board examination. Enhance the pathology knowledge and skills of Professional Veterinary Medicine students and graduate students in related disciplines.

**SOC 324 03(3-0-0). Food Justice. F.**

Fall 2016

Prerequisite: SOC 100 or SOC 105.

Restriction:

Registration Information:

Food justice strives to eliminate exploitation and oppression by challenging the structural drivers within and beyond the food system. As a practice, food justice advocates for the right to healthy food that is justly and sustainably produced, recognizes diverse cultural foodways and histories, and promotes democratic participation and equitable distribution of resources in the food system.

**Major Change to Courses**

**FW 544 03(2-0-1). Ecotoxicology. S.**

Spring 2017

Prerequisite: (LIFE 320 or LAND 220 or LIFE 220) and (STAT 301 or STAT 307).

Restriction: No Freshman. No Sophomore.

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

Online.

Ecological effects of contaminants on populations, communities, and ecosystems.

**MIP 611 04(2-0-2). Advanced Microbiological Research Methods. F.**

Fall 2016

Prerequisite: None.

Restriction: Graduate Only. Professional Only.

Registration Information: Must register for lecture and recitation. Enrollment in Admission to the Face-to-Face offering of the course requires admission to the M.S. in Microbiology, Immunology, and Pathology, Plan B program. Sections may be offered: Online.

In-depth presentation of the ever-growing arsenal of techniques needed to be an effective experimental microbiologist/molecular biologist.

**MIP 613 04(4-0-0). Applied Microbiology and Virology. F.**

Fall 2016

Prerequisite: None.

Restriction: Graduate Only. Professional Only.

Registration Information: Admission to the M.S. Enrollment in the face-to-face offering of this course requires admission to the Microbiology, Immunology, and Pathology M.S. Plan B program. Sections may be offered: Online.

Application of bacteria, fungi and viruses in translational research, from drug and vaccine development to the generation of clean energy.

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**PSY 330 03(3-0-0). Clinical and Counseling Psychology. S-(Even years).**

Fall 2016

Prerequisite: PSY 100.

Restriction:

Registration Information:

Additional Information: AUCC 4C: Capstone Experience in the Psychology major.

Counseling/Clinical Concentration.

Conceptualization Specialty areas, conceptualization of clients, assessment, intervention techniques for behavior change, research methods, ethical issues.

**PSY 488 Var. [1-3]. Field Placement. F, S, SS.**

Fall 2016

Prerequisite: PSY 310 or PSY 330.

Restriction: Enrollment restricted to students in the Counseling/Clinical Concentration.

Registration Information: Maximum of 12 credits allowed for psychology majors toward graduation for any combination of PSY 295, PSY 296, PSY 384, PSY 484, PSY 486, PSY 488, PSY 495A-F, PSY 496A-F, PSY 498A-F, PSY 499A-F; enrollment limited to one per student per semester.

Additional Information: AUCC 4C: Capstone Experience in the Psychology major.

Counseling/Clinical Concentration.

Supervised affiliation with and/or service work in approved psychological setting.

**Major Change to Curricula**

College of Business  
Department of Accounting  
BS in Business Administration  
Accounting Concentration

Effective Fall 2016

**FRESHMAN**

		AUCC	CREDITS
<u>BUS 100</u>	Introduction to Business		1
<u>BUS 150</u>	Business Computing Concepts and Applications		3
<u>BUS 201</u> <sup>1</sup>	Foundations of Sustainable Enterprise		1
<u>BUS 220</u> <sup>1</sup>	Ethics in Contemporary Organizations (GT-AH3)	3B	3
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>ECON 202</u>	Principles of Microeconomics (GT-SS1)	3C	3
<u>MATH 141</u>	Calculus in Management Sciences (GT-MA1)	1B	3
<u>Arts and Humanities</u>		3B	3
<u>Biological and Physical Sciences</u>		3A	4
Electives			6
<b>Total Credits</b>			<b>30</b>

**SOPHOMORE**

<u>ACT 210</u>	Introduction to Financial Accounting		3
<u>ACT 211</u>	Accounting Professional Skills		1
<u>ACT 220</u>	Introduction to Managerial Accounting		3
<u>BUS 260</u>	Social-Ethical-Regulatory Issues in Business		3

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<u>CIS 200</u>	Business Information Systems		3
<u>ECON 204</u>	Principles of Macroeconomics (GT-SS1)	3C	3
<u>STAT 204</u>	Statistics for Business Students		3
<u>Biological and Physical Sciences</u>		3A	3
<u>Historical Perspectives</u>		3D	3
Electives			<u>56</u>
<b>Total Credits</b>			<b>30</b>

## JUNIOR

All freshman and sophomore required courses must be completed prior to or concurrent with first enrollment in required junior and senior courses. By the beginning of the junior year, students must select one of the concentrations.

<u>ACT 311</u>	Intermediate Accounting I		<del>43</del>
<u>ACT 312</u>	Intermediate Accounting II		3
<u>ACT 321</u>	Cost Management		3
<u>ACT 350</u>	Accounting Information Systems		3
<u>BUS 300</u>	Business Writing and Communication (GT-CO3)	2	3
<u>FIN 300</u> <sup>2</sup>	Principles of Finance	4A,4B	3
<u>MKT 300</u> <sup>2</sup>	Marketing	4B	3
Electives			<u>89</u>
<b>Total Credits</b>			<b>30</b>

## SENIOR

<u>ACT 330</u>	Introduction to Taxation		3
<u>ACT 411</u>	Advanced Accounting		3
<u>ACT 441</u>	Auditing Practices		3
<u>ACT *** Accounting Elective</u> <sup>3</sup>	Upper-Division Elective (300- or 400-level)		3
<u>BUS 479</u>	Strategic Management	4A,4C	3
<u>MGT 301</u>	Supply Chain Management		3
<u>MGT 320</u>	Contemporary Management Principles/Practices		3
<u>Global and Cultural Awareness</u>		3E	3
Electives <sup>4,3</sup>			6
<b>Total Credits</b>			<b>30</b>

**Program Total Credits: 120**

<sup>1</sup> Students enrolled in the Business Administration major prior to Fall semester 2013, are not required to take BUS 201 and BUS 220.

<sup>2</sup> Students who have taken FIN 305 and/or MKT 305 prior to admission to the College of Business may substitute those courses to satisfy the AUCC category 4A and 4B requirements. All other students are required to take FIN 300 and MKT 300 to satisfy AUCC categories 4A and 4B.

<sup>3</sup> Choose an additional three upper-division credits in accounting courses (ACT subject code).

<sup>4,3</sup> Select enough elective credits to bring the program total to a minimum of 120 credits, of which at least 42 must be Upper-

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Division (300- or 400- level).



**College of Health & Human Sciences  
Department of Construction Management  
Master of Science in Construction Management, Plan A**

**Effective Fall 2016**

**Core Requirements - Required of All Students**

<u>CON 500</u>	Models of Disciplined Inquiry	3
or <u>EDRM 600</u>	Introduction to Research Methods	
<u>CON 560</u>	Applied Project Management	3
<u>CON 562</u>	Issues and Trends in Construction Management	3
<u>CON 502</u>	Research in Construction Management I	3
<u>CON 503</u>	Research in Construction Management II	3
<u>CON 511</u>	Project Procurement and Preconstruction	3
<u>CON 512</u>	Post-Award Construction Management	3
<u>CON 521</u>	Sustainable Building & Infrastructure Systems	3

**Thesis**

<u>CON 699</u>	Thesis	6 <del>3</del>
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**Construction Management and Information Systems Emphasis**

Emphasis Area Required Courses:	6
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<u>CON 561</u>	Applied Productivity Improvement	
<u>CON 565</u>	Legal Aspects of Construction Process	

Emphasis Area Electives:	12
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**Sustainable Building (SB) Emphases**

Emphasis Area Required Courses:	9
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<u>CON 476</u>	Sustainable Practice Design and Construction	
<u>CON 571</u>	Facility Planning and Management	
<u>CON 576</u>	Sustainable Technology in Build Environments	

Emphasis Area Electives: <sup>1</sup>	9
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Electives <sup>1</sup>	12
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<b>Program Total Credits</b>	<b>33<del>30</del></b>
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A minimum of 33 ~~30~~ credits are required to complete this program.

<sup>1</sup> With approval by advisor. A minimum of 1 CON graduate elective course (which cannot be CON 695) is required. A maximum of 3 credits of CON 695 is allowed.



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**College of Health & Human Sciences  
Department of Construction Management  
Master of Science in Construction Management, Plan B**

**Effective Fall 2016**

**Core Requirements - Required of All Students**

<b>CON 500</b>	Models of Disciplined Inquiry	3
or <b>EDRM 600</b>	Introduction to Research Methods	
<b>CON 560</b>	Applied Project Management	3
<b>CON 562</b>	Issues and Trends in Construction Management	3
<b>CON 502</b>	Research in Construction Management I	3
<b>CON 503</b>	Research in Construction Management II	3
<b>CON 511</b>	Project Procurement and Preconstruction	3
<b>CON 512</b>	Post-Award Construction Management	3
<b>CON 521</b>	Sustainable Building & Infrastructure Systems	3

**Research**

<b>CON 698</b>	Research	3
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**Construction Management and Information Systems Emphasis**

Emphasis Area Required Courses:	6
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<b>CON 561</b>	Applied Productivity Improvement	
<b>CON 565</b>	Legal Aspects of Construction Process	

Emphasis Area Electives:	15
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**Sustainable Building (SB) Emphases**

Emphasis Area Required Courses:	9
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<b>CON 476</b>	Sustainable Practice Design and Construction	
<b>CON 571</b>	Facility Planning and Management	
<b>CON 576</b>	Sustainable Technology in Build Environments	

Emphasis Area Electives: <sup>1</sup>	12
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Electives <sup>1</sup>	18
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<b>Program Total Credits</b>	<b>36/33</b>
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A minimum of 36 33-credits are required to complete this program.

<sup>1</sup> With approval by advisor. A minimum of 2 CON graduate elective courses (which cannot be CON 695) are required. A maximum of 3 credits of CON 695 is allowed.





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**College of Liberal Arts**  
**Department of English**  
**BA in English**  
**Writing, Rhetoric and Literacy Concentration**

**Effective Fall 2016**

For graduation, an English major must attain a minimum grade point average of 2.000 in upper-division composition CO and English E courses.

**FRESHMAN**

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>E 240</u>	Introduction to Poetry		3
<u>SPCM 200</u>	Public Speaking		3
<u>Arts and Humanities<sup>1</sup></u>		3B	6
<u>Biological and Physical Sciences</u>		3A	7
<u>Mathematics</u>		1B	3
Electives			6
<b>Total Credits</b>			<b>31</b>

**SOPHOMORE**

<u>Select one course from the following:</u>			
<u>CO 300</u>	<u>Writing Arguments (GT-CO3)</u>	<u>2</u>	<u>3</u>
<u>CO 301A</u>	<u>Writing in the Disciplines: Arts and Humanities (GT-CO3)</u>	<u>2</u>	<u>3</u>
<u>CO 301B</u>	<u>Writing in the Disciplines: Sciences (GT-CO3)</u>	<u>2</u>	<u>3</u>
<u>CO 301C</u>	<u>Writing in the Disciplines: Social Sciences (GT-CO3)</u>	<u>2</u>	<u>3</u>
<u>CO 301D</u>	<u>Writing in the Disciplines: Education (GT-CO3)</u>	<u>2</u>	<u>3</u>
<u>CO 302</u>	<u>Writing in Digital Environments (GT-CO3)</u>	2	3
<u>E 270</u>	Introduction to American Literature (GT-AH2)	3B	3
<u>Select one course from the following:</u>			
<u>E 276</u>	Survey of British Literature I (GT-AH2)	3B	3
<u>E 277</u>	Survey of British Literature II (GT-AH2)	3B	3
Philosophy <sup>2</sup>			3
<u>Global and Cultural Awareness</u>		3E	3
<u>Historical Perspectives</u>		3D	3
<u>Social and Behavioral Sciences</u>		3C	3
Liberal Arts/History Elective <sup>3</sup>			3

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Electives	5
<b>Total Credits</b>	<b>29</b>

## JUNIOR

Select one course from the following:	-	3
<u>CO 300</u>	Writing Arguments (GT-CO3)	2 -
<u>CO 301A</u>	Writing in the Disciplines: Arts and Humanities (GT-CO3)	2 -
<u>CO 301B</u>	Writing in the Disciplines: Sciences (GT-CO3)	2 -
<u>CO 301C</u>	Writing in the Disciplines: Social Sciences (GT-CO3)	2 -
<u>CO 301D</u>	Writing in the Disciplines: Education (GT-CO3)	2 -
<u>CO 402</u>	Principles of Digital Rhetoric and Design	- 3
<u>E 341</u>	Literary Criticism and Theory	4A,4B 3
Second field <sup>4</sup>		6
Upper-Division English/Composition Electives (See list below) <sup>5</sup>		6
Electives		12
<b>Total Credits</b>		<b>30</b>

## SENIOR

<u>CO 401</u>	Writing and Style	3
<u>E 406</u>	Topics in Literacy	3

Select one course from the following:		
<u>E 460</u>	Chaucer	4C 3
<u>E 465</u>	Topics in Literature and Language	4C 3
<u>E 470</u>	Individual Author	4C 3

Second field <sup>4</sup>		6
Upper-Division English/Composition Electives (See list below) <sup>5</sup>		9
Electives <sup>5,6</sup>		6
<b>Total Credits</b>		<b>30</b>
<b>Program Total Credits:</b>		<b>120</b>

## Upper-Division English/Composition Electives

Select a total of 15 credits of upper-division electives in E and CO subject code courses.

Code	Title	Credits
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### Designated Writing

Select one course from the following:		
<u>CO 300</u>	Writing Arguments (GT-CO3)	
<u>CO 301A</u>	Writing in the Disciplines: Arts and Humanities (GT-CO3)	3
<u>CO 301B</u>	Writing in the Disciplines: Sciences (GT-CO3)	3
<u>CO 301C</u>	Writing in the Disciplines: Social Sciences (GT-CO3)	3

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Code	Title	Credits
<u>CO 301D</u>	Writing in the Disciplines: Education (GT-CO3)	3
<u>E 311C</u>	Intermediate Creative Writing: Nonfiction	3
<u>E 403</u>	Writing the Environment	3
<u>E 412C</u>	Creative Writing Workshop: Nonfiction	3

#### Writing Theory and Pedagogy

Select one course from the following:		
<u>E 402</u>	Teaching Composition	3
<u>E 406</u>	Topics in Literacy	3
<u>E 501</u>	Theories of Writing	3
<u>E 502</u>	Language, Literacy, and Learning	3
<u>E 526</u>	Teaching English as a Foreign/Second Language	3

#### Literature

Select 3 credits in literature courses	3
Select 6 credits from any upper-division writing, literature, theory, and/or language courses	6

- <sup>1</sup> Excludes E subject code courses.
- <sup>2</sup> Select from the list of PHIL courses on English Department checksheet.
- <sup>3</sup> Select either one other course from the list of courses in All-University Core Curriculum (AUCC) 3D or one from the list of courses on the English Department checksheet.
- <sup>4</sup> The department requires majors to complete a second field. This may be met by completing the second semester of the second year of a foreign language or by completing 12 credits of upper-division courses in a coherent field of study outside of English.
- <sup>5</sup> Select courses not taken elsewhere in the program from the Upper-Division English/Composition List, for a program minimum total of 15 credits.
- <sup>5, 6</sup> 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).



College of Liberal Arts  
Department of Music, Theatre, and Dance  
BA in Theatre  
Design and Technology Concentration

Effective Fall 2016

#### FRESHMAN

	AUCC	CREDITS
Select one course from the following:		
<u>ART 100</u>	Introduction to the Visual Arts (GT-AH1)	3B 3
<u>D 110</u>	Understanding Dance (GT-AH1)	3B 3
<u>MU 100</u>	Music Appreciation (GT-AH1)	3B 3

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<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>TH 141</u>	Introduction to Theatre (GT-AH1)	3B	3
<u>TH 150</u>	Introduction to Performance		3
<u>TH 160</u>	Drawing for the Theatre		3
<u>TH 161</u>	Technical Theatre: Stagecraft		3
<u>TH 163</u>	Costume Construction for the Theatre	-	3
<u>TH 175</u>	Storytelling	-	3
<u>TH 186</u>	Theatre Practicum I		1
<u>TH 292<sup>+</sup></u>	Design and Technology Seminar	-	2
<u>TH 192</u>	Freshman Seminar	-	3
<u>Mathematics</u>		1B	3
<u>Electives</u>		-	9
<b>Total Credits</b>			<b>3130</b>

## SOPHOMORE

Select one course from the following:

<u>ART 100</u>	Introduction to the Visual Arts (GT-AH1)	3B	3
<u>D 110</u>	Understanding Dance (GT-AH1)	3B	3
<u>MU 100</u>	Music Appreciation (GT-AH1)	3B	3
<u>TH 241</u>	Text Analysis for the Theatre		3
<u>TH 242</u>	Theatre History I		3
<u>TH 243</u>	Theatre History II		3
<u>TH 260</u>	Computer Assisted Drafting for Theatre		3

Select one course from the following:

<u>TH 262</u>	Stage Management I		3
<u>TH 263</u>	Costume Design I		3
<u>TH 264</u>	Lighting Design for the Theatre I		3
<u>TH 266</u>	Digital Media Design for Live Performance I		3
<u>TH 269</u>	Theatrical Makeup	-	3
<u>TH 265</u>	Set Design I		3

<u>TH 275</u>	Self-Scripting and Performance Workshop	-	3
<u>TH 286</u>	Theatre Practicum II		1
<u>TH 292<sup>1</sup></u>	Design and Technology Seminar		2
<u>Biological and Physical Sciences</u>		3A	3
<u>Historical Perspectives</u>		3D	3
<u>Elective</u>		-	3
<b>Total Credits</b>			<b>30</b>

## JUNIOR

## University Curriculum Committee

January 22, 2016

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<u>CO 301A</u>	Writing in the Disciplines: Arts and Humanities (GT-CO3)	2	3
<u>TH 292<sup>+</sup></u>	Design and Technology Seminar	-	<u>2</u>
<u>TH 301<sup>2</sup></u>	Theatre Design and Production Special Topics	-	6

Select one course from the following:

<u>TH 362</u>	Stage Management II	4A	3
<u>TH 363</u>	Costume Design II	4A	3
<u>TH 364</u>	Lighting Design for the Theatre II	4A	3
<u>TH 365</u>	Advanced Scenic Design	4A	3
<u>TH 366</u>	Digital Media Design for Live Performance II	4A	3

<u>TH 370A</u>	Theatre Assistant: Design	-	<u>3</u>
<u>TH 384</u>	Supervised College Teaching	-	3
<u>TH 386</u>	Theatre Practicum III		1
<u>TH 400<sup>2</sup></u>	Theatre Production Workshop	-	<u>1</u>

Select one course from the following:

<u>TH 262</u>	Stage Management I	-	<u>3</u>
<u>TH 263</u>	Costume Design I	-	<u>3</u>
<u>TH 264</u>	Lighting Design for the Theatre I	-	<u>3</u>
<u>TH 265</u>	Set Design I	-	<u>3</u>
<u>TH 266</u>	Digital Media Design for Live Performance I	-	<u>3</u>

TH *** Upper-Division TH Elective			3
<u>Biological and Physical Sciences</u>		3A	4
<u>Global and Cultural Awareness</u>		3E	3
<u>Elective</u>		-	<u>7</u>
<b>Total Credits</b>			<b><u>2834</u></b>

**SENIOR**

<u>TH 392</u>	Theatre Seminar	-	3
<u>TH 370A</u>	Theatre Assistant: Design	-	<u>3</u>
<u>TH 400<sup>2</sup></u>	Theatre Production Workshop	-	<u>2</u>
<u>TH 401</u>	Theatrical Design and Prod Advanced Topics		3

Select one course from the following:

<u>TH 460</u>	Design Portfolio and Professional Preparation	4B,4C	3
<u>TH 471</u>	Capstone in Theatre Practice	4B,4C	3

<u>TH 484</u>	Supervised College Teaching	-	3
<u>TH 486</u>	Theatre Practicum IV		2
<u>Social and Behavioral Sciences</u>		3C	3

Electives <sup>3</sup>			<u>1542</u>
<b>Total Credits</b>			<b><u>3129</u></b>

**Program Total Credits:**

**120**

- <sup>1</sup> ~~Students should take TH 292 should be taken for 1 credit, two semesters total, each in the freshman, sophomore, and junior years.~~
- <sup>2</sup> ~~TH 400 should be taken for 1 credit, three semesters total. TH 301 must be taken two semesters, once in the Fall, and once in the Spring, of the junior year.~~
- <sup>3</sup> 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).



**College of Liberal Arts  
Department of Music, Theatre, and Dance  
BA in Theatre  
General Theatre Concentration**

**Effective Fall 2016**

**FRESHMAN**

		AUCC	CREDITS
Select <del>two</del> <u>one</u> courses from the following:			
<u>ART 100</u>	Introduction to the Visual Arts (GT-AH1)	3B	3
<u>D 110</u>	Understanding Dance (GT-AH1)	3B	3
<u>MU 100</u>	Music Appreciation (GT-AH1)	3B	3
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>TH 141</u>	Introduction to Theatre (GT-AH1)	3B	3
Select one from the following:			3
<u>TH 150</u>	Introduction to Performance		3
<u>TH 160</u>	Drawing for the Theatre		3
<u>TH 175</u>	Storytelling	-	3
<u>TH 161</u>	Technical Theatre: Stagecraft	-	3
<u>TH 186</u>	Theatre Practicum I		<u>12</u>
<u>TH 192</u>	Freshman Seminar	-	3
<u>Biological and Physical Sciences</u>		3A	3
<u>Mathematics</u>		1B	3
<u>Social and Behavioral Sciences</u>		3C	3
<u>Elective</u>			<u>32</u>
<b>Total Credits</b>			<b>31</b>

**SOPHOMORE**

Select one from the following:

<u>TH 151</u>	Acting I		3
<u>TH 161</u>	Technical Theatre: Stagecraft	-	-
<u>TH 241</u>	Text Analysis for the Theatre		3
<u>TH 242</u>	Theatre History I		3

Select at least two of the following courses for a minimum of 6 credits:	-	6
<u>TH 249</u> Movement for Actors II	-	-
<u>TH 250</u> Voice and Speech for the Stage	-	-
<u>TH 255</u> Directing Workshop		3
<u>TH 260</u> Computer Assisted Drafting for Theatre	-	3
Select one course of the following:		
<u>TH 262</u> Stage Management I		3
<u>TH 263</u> Costume Design I		3
<u>TH 264</u> Lighting Design for the Theatre I		3
<u>TH 265</u> Set Design I		3
<u>TH 266</u> Digital Media Design for Live Performance I		3
<u>TH 275</u> Self-Scripting and Performance Workshop	-	3
Select one of the following courses not taken elsewhere:	-	3
<u>TH 251</u> Acting II	-	-
<u>TH 255</u> Directing Workshop	-	-
<u>TH 261</u> Drawing and Drafting for the Theatre	-	-
<u>TH 275</u> Self-Scripting and Performance Workshop	-	-
<u>TH 286</u> Theatre Practicum II		1
Advanced Writing	2	3
Biological and Physical Sciences	3A	4
Global and Cultural Awareness	3E	3
Historical Perspectives	3D	3
Social and Behavioral Sciences	3C	3
<b>Total Credits</b>		<b>32</b>

**JUNIOR**

<u>TH 243</u> Theatre History II		3
Select one course from the following:	-	3
<u>TH 351</u> Acting III	4A	-
Select one course from the following:	-	
<u>TH 355</u> Directing Seminar	4A	3
<u>TH 375</u> Playwright's Workshop	4A	3
<u>TH 362</u> Stage Management II	4A	-
<u>TH 363</u> Costume Design II	4A	-
<u>TH 364</u> Lighting Design for the Theatre II	4A	-
<u>TH 365</u> Advanced Scene Design	4A	-
<u>TH 366</u> Digital Media Design for Live Performance II	4A	-
Select one course from the following not already taken:	-	

<u>TH 251</u>	<u>Acting II</u>		<u>3</u>
<u>TH 344</u>	<u>Dramaturgy Protocol Seminar</u>	-	<u>3</u>
<u>TH 355</u>	<u>Directing Seminar</u>	4A	<u>3</u>
<u>TH 375</u>	<u>Playwright's Workshop</u>	4A	<u>3</u>
<u>TH 386</u>	<u>Theatre Practicum III</u>		1
<hr/>			
TH ***	Upper-division TH Electives	-	9
<u>Arts and Humanities</u>		3B	3
<u>TH 400<sup>1</sup></u>	<u>Theatre Production Workshop</u>	-	<u>2</u>
<u>Historical Perspectives</u>		3D	<u>3</u>
Electives			<u>15+4</u>
<b>Total Credits</b>			<b>30</b>

### SENIOR

Select one course from the following:

<u>TH 400<sup>1</sup></u>	<u>Theatre Production Workshop</u>	-	<u>1</u>
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Select one course from the following:

<u>TH 450</u>	<u>Professional Actor Preparation</u>	4B	3
<u>TH 455</u>	<u>Advanced Directing</u>	4B,4C	<del>3</del>
<u>TH 460</u>	<u>Design Portfolio and Professional Preparation</u>	4B	3
<u>TH 471</u>	<u>Capstone in Theatre Practice</u>	4C	3
<u>TH 475</u>	<u>Advanced Playwriting</u>	4B,4C	-
<u>TH 499</u>	<u>Theatre Thesis</u>	4B,4C	-

TH ***	Upper-division TH Electives	-	9
Electives <sup>+</sup>		-	17-18

Select one course from the following:

<u>TH 401</u>	<u>Theatrical Design and Prod Advanced Topics</u>	-	<u>3</u>
<u>TH 451</u>	<u>Advanced Topics in Acting</u>	-	<u>3</u>

Electives <sup>2</sup>		-	<u>17</u>
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**Total Credits** **27**

**Program Total Credits:** **120**

<sup>1</sup> TH 400 should be taken for 1 credit, three semesters total. 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).

<sup>2</sup> 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).





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**BA in Theatre  
Performance Concentration**

**FRESHMAN**

		<b>AUCC</b>	<b>CREDITS</b>
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
Select one from the following:		-	2
<u>D 120A</u>	Dance Techniques I: Modern	-	-
<u>D 120B</u>	Dance Techniques I: Ballet	-	-
<u>TH 141</u>	Introduction to Theatre (GT-AH1)	3B	3
Select two courses from the following:		-	
<u>ART 100</u>	Introduction to the Visual Arts (GT-AH1)	3B	3
<u>D 110</u>	Understanding Dance (GT-AH1)	3B	3
<u>MU 100</u>	Music Appreciation (GT-AH1)	3B	3
<u>TH 150</u>	Introduction to Performance		3
<u>TH 151</u>	Acting I		3
<u>TH 153</u>	Singing for Actors I	-	2
<u>TH 161</u>	Technical Theatre: Stagecraft		3
<u>TH 175</u>	Storytelling	-	3
<u>TH 186</u>	Theatre Practicum I		1
<u>Biological and Physical Sciences</u>		3A	4
<u>TH 192</u>	Freshman Seminar	-	3
<u>Mathematics</u>		1B	3
<u>Electives</u>		-	6
<b>Total Credits</b>			<b>3130</b>

**SOPHOMORE**

<u>CO 301A</u>	Writing in the Disciplines: Arts and Humanities (GT-CO3)	2	3
<u>TH 240</u>	Reading Shakespeare for the Theatre	-	3
<u>TH 241</u>	Text Analysis for the Theatre		3
<u>TH 242</u>	Theatre History I		3
<u>TH 243</u>	Theatre History II		3
<u>TH 250</u>	Voice and Speech for the Stage		3 2
<u>TH 251</u>	Acting II		3
<u>TH 253</u>	Singing for Actors II	-	2
<u>TH 275</u>	Self-Scripting and Performance Workshop	-	3
<u>TH 286</u>	Theatre Practicum II		1
<u>Arts and Humanities</u>		3B	3
<u>TH 255</u>	Directing Workshop	-	3

## University Curriculum Committee

January 22, 2016

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<u>Biological and Physical Sciences</u>	3A	<u>73</u>
<u>Elective</u>	-	<u>3</u>
<b>Total Credits</b>		<b>32</b>

**JUNIOR**

<u>TH 269</u>	Theatrical Makeup	-	<u>3</u>
<u>TH 343</u>	Contemporary Plays and Alternative Theatre	-	<u>3</u>
<u>TH 349</u>	Movement for Actors III	-	<u>2</u>
<u>TH 350</u>	Classical Text		<u>3</u>

Select one course from the following:	-	
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<u>TH 344</u>	Dramaturgy Protocol Seminar	-	<u>3</u>
<u>TH 375</u>	Playwright's Workshop	4A	<u>3</u>

Select one course from the following:	-	
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<u>TH 351</u>	Acting III	4A	<u>3</u>
<u>TH 355</u>	Directing Seminar	4A	<u>3</u>

<u>TH 386</u>	Theatre Practicum III		<u>1</u>
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<u>TH 392</u>	Theatre Seminar	-	<u>3</u>
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<u>TH 400</u> <sup>1</sup>	Theatre Production Workshop	-	<u>1</u>
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<u>Global and Cultural Awareness</u>	3E	<u>3</u>
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<u>Historical Perspectives</u>	3D	<u>3</u>
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<u>Elective</u>		<u>123</u>
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<b>Total Credits</b>	<b>29</b>
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**SENIOR**

<u>TH 449</u>	Commedia and Masks	-	<u>3</u>
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<u>TH 400</u> <sup>1</sup>	Theatre Production Workshop	-	<u>2</u>
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<u>TH 450</u>	Professional Actor Preparation	4B, 4C	<u>3</u>
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<u>TH 451</u> <sup>+</sup>	Advanced Topics in Acting		<u>3</u>
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<u>TH 492</u>	Theatre Seminar	-	<u>3</u>
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<u>TH 471</u>	Capstone in Theatre Practice	4C	<u>3</u>
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<u>Social and Behavioral Sciences</u>	3C	<u>3</u>
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<u>Electives</u> <sup>2</sup>		<u>1443</u>
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<b>Total Credits</b>	<b>28</b>
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<b>Program Total Credits:</b>	<b>120</b>
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<sup>1</sup> TH 400 should be taken for 1 credit, three semesters total. Students must take TH 451 for two semesters, for three credits each time, and for different topics.

<sup>2</sup> 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).

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**College of Liberal Arts  
Department of Philosophy  
BA in Philosophy  
General Philosophy Concentration**

**Effective Fall 2016**

Students are required to receive at least a C- (1.670) in each Philosophy course required for the concentration in General Philosophy, major or minor in Philosophy. The minimum scholastic average acceptable for graduation is 2.000 computed only for courses attempted at CSU.

**FRESHMAN**

		<b>AUCC</b>	<b>CREDITS</b>
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
Select one from the following:		-	3
<u>PHIL 100</u>	Appreciation of Philosophy (GT-AH3)	3B	-
<u>PHIL 103</u>	Moral and Social Problems (GT-AH3)	3B	-
Select one from the following:		-	3
<u>PHIL 120</u>	History and Philosophy of Scientific Thought (GT-AH3)	3B	-
<u>PHIL 170</u>	World Philosophies (GT-AH3)	3E	-
<u>PHIL 110</u>	Logic and Critical Thinking (GT-AH3)	3B	3
<u>Biological and Physical Sciences</u>		3A	7
<u>Arts and Humanities</u>		3B	3
<u>Historical Perspectives</u>		3D	3
<u>Mathematics</u>		1B	3
<u>Social and Behavioral Sciences</u>		3C	3
Elective		-	3
<u>PHIL *** Lower-Division Philosophy Elective</u> <sup>1</sup>		-	3
<u>Electives</u>		-	6
<b>Total Credits</b>			<b>31</b>

**SOPHOMORE**

<u>PHIL 205</u>	Introduction to Ethics		3
<u>PHIL 206</u>	Knowledge and Existence—An Introduction	-	3
<u>PHIL 210</u>	Introduction to Formal Logic		3
<u>PHIL *** Philosophy Elective</u>		-	3
<u>Advanced Writing</u>		2	3
<u>Arts and Humanities</u>		3B	3
<u>Global and Cultural Awareness</u>		3E	3
Electives			1346
<b>Total Credits</b>			<b>31</b>

**JUNIOR**

<u>PHIL 300</u>	Ancient Greek Philosophy	4A	3
<u>PHIL 301</u>	17th and 18th Century European Philosophy	4A	3
Select one course from the following:			
<u>PHIL 170</u>	World Philosophies (GT-AH3)	3E	3
<u>PHIL 335</u>	Islam: Cosmology and Practice	-	3
<u>PHIL 349</u>	Philosophies of East Asia	-	3
<u>PHIL 353</u>	Feminist Philosophies	-	3
<u>PHIL 360</u>	Topics in Asian Philosophy	-	3
<u>PHIL 455</u>	Islamic Philosophy	-	3
PHIL*** Upper-Division Philosophy Elective <sup>2</sup>			3
Electives			1824
Total Credits			30

SENIOR

<u>PHIL 462</u>	Capstone Seminar	4B,4C	3
Select one course from the following:			
<u>PHIL 302</u>	19th Century Philosophy	-	3
<u>PHIL 409</u>	20th Century Philosophy	-	3
<u>PHIL 315</u>	Philosophy of Language	-	3
<u>PHIL 325</u>	Philosophy of Natural Science	-	3
<u>PHIL 425</u>	Epistemology	-	3
<u>PHIL 435</u>	Metaphysics	-	3
<u>PHIL 447</u>	Ethical Theory	-	3
<u>PHIL 438</u>	Philosophy of Mind	-	3
PHIL*** Upper-Division Philosophy Electives <sup>2</sup>			6
Electives <sup>3+</sup>			1643
Total Credits			28

Program Total Credits: 120

- <sup>1</sup> No more than 6 PHIL credits at the 100-level may be applied toward the major. Select enough elective credits to bring the program total to 120, of which at least 42 must be Upper-Division (300- to 400-level).
- <sup>2</sup> At least 6 PHIL credits must be at the 400-level.
- <sup>3</sup> Select enough elective credits to bring the program total to 120, of which at least 42 must be Upper-Division (300- to 400-level).



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Students are required to receive at least a C- (1.670) in each Philosophy course required for the concentration in Global Philosophies and Religions ~~major or minor in Philosophy~~. The ~~minimum scholastic average~~ acceptable for graduation is 2.000 computed only for courses attempted at CSU.

### FRESHMAN

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>PHIL 110</u>	Logic and Critical Thinking (GT-AH3)	3B	3
<u>PHIL 170</u>	World Philosophies (GT-AH3)	3E	3
<u>PHIL 171</u>	Religions of the West	-	3
<u>PHIL 172</u>	Religions of the East	-	3
<u>Arts and Humanities</u>		3B	3
<u>Biological and Physical Sciences</u>		3A	7
<u>Historical Perspectives</u>		3D	3
<u>Mathematics</u>		1B	3
<u>PHIL *** Lower-Division Philosophy Electives<sup>1</sup></u>		-	6
<u>Electives</u>		-	6
<b>Total Credits</b>			<b>31</b>

### SOPHOMORE

Select one course from the following:			
<u>PHIL 205</u>	Introduction to Ethics	-	3
<u>PHIL 206</u>	Knowledge and Existence: An Introduction	-	3
<u>PHIL 110</u>	Logic and Critical Thinking (GT-AH3)	3B	3
<u>PHIL 210</u>	Introduction to Formal Logic	-	3
<u>PHIL 270</u>	Issues in the Study of Religion	-	3
<u>Advanced Writing</u>		2	3
<u>Arts and Humanities</u>		3B	3
<u>Social and Behavioral Sciences</u>		3C	3
<u>PHIL *** Philosophy Electives</u>		-	6
<u>Electives</u>			<u>12</u> <del>15</del>
<b>Total Credits</b>			<b>30</b>

### JUNIOR

<u>PHIL 300</u>	Ancient Greek Philosophy	4A	3
<u>PHIL 301</u>	17th and 18th Century European Philosophy	4A	3
Select <del>two</del> <u>one</u> courses from the following:			
<u>PHIL 270</u>	Issues in the Study of Religion	-	3
<u>PHIL 335</u>	Islam: Cosmology and Practice	-	3
<u>PHIL 355</u>	Philosophy of Religion		3
<u>PHIL 370</u>	Contemporary Western Religious Thought		3

<u>PHIL 372</u>	Meaning and Truth in Religion		3
<u>PHIL 375</u>	Science and Religion		3
Select one course from the following:		-	3
<u>PHIL 349</u>	Philosophies of East Asia	-	-
<u>PHIL 360</u>	Topics in Asian Philosophy	-	-
<u>PHIL 371</u>	Contemporary Eastern Religious Thought	-	-
<u>PHIL 379</u>	Mysticism East and West	-	-
<u>PHIL 463</u>	Seminar in Religious Studies	-	3
Electives <sup>+</sup>			16
<b>Total Credits</b>			<b>28</b>

### SENIOR

Select one from the following:		-	3
<u>PHIL 425</u>	Epistemology	-	-
<u>PHIL 435</u>	Metaphysics	-	-
Select one course from the following:		-	3
<u>PHIL 447</u>	Ethical Theory	-	-
Select two courses from the following:		-	
<u>PHIL 349</u>	Philosophies of East Asia	-	3
<u>PHIL 360</u>	Topics in Asian Philosophy	-	3
<u>PHIL 371</u>	Contemporary Eastern Religious Thought	-	3
<u>PHIL 379</u>	Mysticism East and West	-	3
<u>PHIL 455</u>	Islamic Philosophy		3
<u>PHIL 463</u>	Seminar in Religious Studies	-	3
<u>PHIL 462</u>	Capstone Seminar	4B,4C	3
Electives <sup>2+</sup>			22
<b>Total Credits</b>			<b>31</b>

**Program Total Credits:**

**120**

<sup>1</sup> A maximum of 9 PHIL credit hours at the 100-level may be applied toward the major. Select enough elective credits to bring the program total to 120, of which at least 42 must be Upper-Division (300- to 400-level).

<sup>2</sup> Select enough elective credits to bring the program total to 120, of which at least 42 must be Upper-Division (300- to 400-level).



College of Liberal Arts  
Department of Philosophy  
BA in Philosophy  
Philosophy, Science, and Technology Concentration

Effective Fall 2016

Students are required to receive at least a C- (1.670) in each Philosophy course required for the concentration in Philosophy, Science, and Technology, major or minor in Philosophy. The minimum scholastic average acceptable for graduation is 2.000 computed only for courses attempted at CSU.

**FRESHMAN**

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		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>PHIL 110</u>	Logic and Critical Thinking (GT-AH3)	3B	3
<u>PHIL 120</u>	History and Philosophy of Scientific Thought (GT-AH3)	3B	3
<u>Biological and Physical Sciences</u>		3A	7
<u>Historical Perspectives</u>		3D	3
<u>Mathematics</u>		1B	3
<u>PHIL*** Lower-division Philosophy Elective<sup>1</sup></u>		-	<u>3</u>
Electives			9
<b>Total Credits</b>			<b>31</b>

## SOPHOMORE

<u>PHIL 205</u>	Introduction to Ethics	-	3
<u>PHIL 206</u>	Knowledge and Existence: An Introduction	-	3
<u>PHIL 210</u>	Introduction to Formal Logic		3
Science and Technology Elective <sup>+</sup>		-	3
<u>Advanced Writing</u>		2	3
<u>Arts and Humanities</u>		<u>3B</u>	<u>3</u>
<u>Global and Cultural Awareness</u>		3E	3
<u>Social and Behavioral Sciences</u>		3C	3
<u>PHIL*** Philosophy Electives<sup>2</sup></u>		-	<u>6</u>
Electives			9
<b>Total Credits</b>			<b>30</b>

## JUNIOR

<u>PHIL 300</u>	Ancient Greek Philosophy	4A	3
<u>PHIL 301</u>	17th and 18th Century European Philosophy	4A	3

Select one course from the following:

<u>PHIL 325</u>	Philosophy of Natural Science		3
<u>PHIL 327</u>	Philosophy of Behavioral Sciences		3

Select one from the following:

<u>PHIL 345</u>	Environmental Ethics	-	-
<u>PHIL 375</u>	Science and Religion	-	-

<u>PHIL*** Upper-Division Philosophy Elective<sup>3</sup></u>		-	<u>3</u>
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Electives			17
<b>Total Credits</b>			<b>29</b>

## SENIOR

Select one course from the following:

<u>PHIL 302</u>	19th-Century Philosophy	-	<u>3</u>
<u>PHIL 409</u>	20th-Century Philosophy	-	<u>3</u>
<u>PHIL 315</u>	Philosophy of Language	-	<u>3</u>
<u>PHIL 410</u>	Formal Logic		3
<u>PHIL 411</u>	Formal Tools in Philosophy		3
<u>PHIL 415</u>	Logic and Scientific Method		3
<u>PHIL 425</u>	Epistemology		3
<u>PHIL 435</u>	Metaphysics		3
<u>PHIL 438</u>	Philosophy of Mind	-	<u>3</u>
Select one course from the following:			
<u>PHIL 205</u>	Introduction to Ethics	-	<u>3</u>
<u>PHIL 305A</u>	Philosophical Issues in the Professions: Business Ethics	-	<u>3</u>
<u>PHIL 305B</u>	Philosophical Issues in the Professions: Medical Life Science	-	<u>3</u>
<u>PHIL 305C</u>	Philosophical Issues in the Professions: Caring Professions	-	<u>3</u>
<u>PHIL 305D</u>	Philosophical Issues in the Professions: Engineering	-	<u>3</u>
<u>PHIL 305E</u>	Philosophical Issues in the Professions: Animal Science	-	<u>3</u>
<u>PHIL 305F</u>	Philosophical Issues in the Professions: Information Science	-	<u>3</u>
<u>PHIL 305G</u>	Philosophical Issues in the Professions: Research Ethics	-	<u>3</u>
<u>PHIL 320</u>	Ethics of Sustainability	-	<u>3</u>
<u>PHIL 330</u>	Agricultural and Food System Ethics	-	<u>3</u>
<u>PHIL 345</u>	Environmental Ethics	-	<u>3</u>
<u>PHIL 350</u>	Social and Political Philosophy	-	<u>3</u>
<u>PHIL 447</u>	Ethical Theory	-	<u>3</u>
<u>PHIL 462</u>	Capstone Seminar	4B,4C	3
Electives <sup>42</sup>			<u>2145</u>
<b>Total Credits</b>			<b>30</b>

**Program Total Credits:****120**

- <sup>1</sup> A maximum of 9 PHIL credit hours at the 100-level may be applied toward the major. ~~Three credits in addition to the All-University Core Curriculum (AUCC) science requirement. Course must be in the College of Natural Sciences or the College of Engineering.~~
- <sup>2</sup> A minimum of 18 PHIL credit hours must be at the 300-level or higher. ~~Select enough elective credits to bring the program total to 120, of which at least 42 must be Upper-Division (300- to 400-level).~~
- <sup>3</sup> A minimum of 6 PHIL credit hours must be at the 400-level or higher.
- <sup>4</sup> ~~Select enough elective credits to bring the program total to 120, of which at least 42 must be Upper-Division (300- to 400-level).~~





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## Global Tourism Concentration

### FRESHMAN

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>ECON 202</u>	Principles of Microeconomics (GT-SS1)	3C	3
Select one of the following:			
L*** 107 First Year Language II			5
L*** 108 Intensive Language I			5
<u>MATH 117</u>	College Algebra in Context I (GT-MA1)	1B	1
<u>MATH 118</u>	College Algebra in Context II (GT-MA1)	1B	1
<u>MATH 124</u>	Logarithmic and Exponential Functions (GT-MA1)	1B	1
<u>NR 120A or 120B</u>	Environmental Conservation (GT-SC2) Environmental Conservation	3A	3-4
<u>SPCM 200</u>	Public Speaking		3
<u>Arts and Humanities</u>		3B	3
<u>Biological and Physical Sciences</u>		3A	7
Elective			1
<b>Total Credits</b>			<b>31-32</b>

### SOPHOMORE

<u>ACT 205</u>	Fundamentals of Accounting		3
<u>BUS 205</u>	Legal and Ethical Issues in Business		3
L*** 200 Second Year Language I			3
L*** 201 Second Year Language II			3
<u>RRM 101</u>	Hospitality Industry		3
<u>RRM 200</u>	Hotel Operations		3
<u>NRRT 270</u>	Principles of Natural Resource Tourism		3
<u>STAT 201</u>	General Statistics		3
<u>Arts and Humanities</u>		3B	3
<b>Total Credits</b>			<b>27</b>

### JUNIOR

Select one course from the following:			
<u>CO 300</u>	Writing Arguments (GT-CO3)	2	3
<u>CO 301A</u>	Writing in the Disciplines: Arts and Humanities (GT-CO3)	2	3
<u>CO 301B</u>	Writing in the Disciplines: Sciences (GT-CO3)	2	3
<u>CO 301C</u>	Writing in the Disciplines: Social Sciences (GT-CO3)	2	3
<u>CO 301D</u>	Writing in the Disciplines: Education (GT-CO3)	2	3
<u>JTC 300</u>	Professional and Technical Communication (GT-CO3)	2	3

Select one from the following:		
L*** 300 Reading and Writing for Communication		3
L*** 304 Third-Year Language I		3
Select one from the following:		
L*** 305 Third-Year Language II		3
L*** 335 Issues in Culture		3

<u>MGT 305</u>	Fundamentals of Management		3
<u>MKT 305</u>	Fundamentals of Marketing		3
<u>NR 320</u>	Natural Resources History and Policy	3D	3
<u>NR 387</u>	Internship I		1
<u>NRRT 320</u>	International Issues-Recreation and Tourism		3
<u>NRRT 370</u>	Managing Tourism in the E-Commerce Era		3
<u>NRRT 376</u>	Human Dimensions Research and Analysis		3
<u>Global and Cultural Awareness</u> <sup>1</sup>		3E	0-3
<b>Total Credits</b>			<b>28-31</b>

**SENIOR**

<u>MKT 365</u>	International Marketing		3
<u>NR 300</u>	Biological Diversity		3
<u>NRRT 442</u>	Tourism Planning	4B,4C	3
<u>NRRT 470</u>	Tourism Impacts	4A	3
<u>NRRT 471</u>	Starting and Managing Tourism Enterprise		3
<u>NRRT 487</u>	Internship		4
<u>NRRT 499</u>	Senior Thesis		3
<u>RRM 350</u>	Restaurant and Resort Marketing		3
Upper-division language electives <sup>2</sup>			5-10
<b>Total Credits</b>			<b>30-35</b>

**Program Total Credits:****120-121**<sup>1</sup> This requirement is automatically satisfied by studying abroad with SA 482.<sup>2</sup> Select enough elective credits to bring the program total to 120, of which at least 42 must be Upper-Division (300- to 400-level).

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## University Curriculum Committee

January 22, 2016

Page 25

<u><b>BUS 150</b></u>	Business Computing Concepts and Applications		3
<u><b>CO 150</b></u>	College Composition (GT-CO2)	1A	3
<u><b>ECON 202</b></u>	Principles of Microeconomics (GT-SS1)	3C	3
<u><b>MATH 117</b></u>	College Algebra in Context I (GT-MA1)	1B	1
<u><b>MATH 118</b></u>	College Algebra in Context II (GT-MA1)	1B	1
<u><b>MATH 124</b></u>	Logarithmic and Exponential Functions (GT-MA1)	1B	1
<u><b>Arts and Humanities</b></u>		3B	6
<u><b>Biological and Physical Sciences</b></u>		3A	7
Political Science Elective <sup>1</sup>			3
Guided Elective <sup>1</sup>			2
<b>Total Credits</b>			<b>30</b>

**SOPHOMORE**

<u><b>ACT 205</b></u>	Fundamentals of Accounting		3
<u><b>BUS 205</b></u>	Legal and Ethical Issues in Business		3
<u><b>NRRT 231</b></u>	Principles-Parks/Protected Area Management		3
<u><b>NRRT 270</b></u>	Principles of Natural Resource Tourism		3
<u><b>RRM 101</b></u>	Hospitality Industry		3
<u><b>SPCM 200</b></u>	Public Speaking		3
<u><b>STAT 201</b></u>	General Statistics		3
Guided Elective <sup>1</sup>			6
<b>Total Credits</b>			<b>27</b>

**JUNIOR**

<u><b>MGT 305</b></u>	Fundamentals of Management		3
<u><b>MKT 305</b></u>	Fundamentals of Marketing		3

Select one course from the following:

<u><b>JTC 350</b></u>	Public Relations		3
<u><b>NR 400</b></u>	Public Relations in Natural Resources		3
<u><b>NR 320</b></u>	Natural Resources History and Policy	3D	3
<u><b>NR 387</b></u>	Internship I		1
<u><b>NRRT 320</b></u>	International Issues-Recreation and Tourism		3
<u><b>NRRT 376</b></u>	Human Dimensions Research and Analysis		3
<u><b>Advanced Writing</b></u>		2	3
<u><b>Global and Cultural Awareness</b></u>		3E	3
Guided Electives <sup>1</sup>			6
<b>Total Credits</b>			<b>31</b>

**SENIOR**

<u><b>NRRT 330</b></u>	Social Aspects of Natural Resource Management		3
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<u>NRRT 372</u>	Tourism Promotion		3
<u>NRRT 442</u>	Tourism Planning	4B,4C	3
<u>NRRT 460/RRM 460</u>	Event and Conference Planning		3
<u>NRRT 470</u>	Tourism Impacts	4A	3
<u>NRRT 471</u>	Starting and Managing Tourism Enterprise		3
<u>NRRT 487</u>	Internship		5
Guided Electives <sup>1, 2</sup>			9
<b>Total Credits</b>			<b>32</b>
<b>Program Total Credits:</b>			<b>120</b>

<sup>1</sup> Select from departmental list of approved courses.

<sup>2</sup> Select enough elective credits to bring the program total to 120, of which at least 42 must be Upper-Division (300- to 400-level).



The meeting adjourned at 5:05 p.m.

(FC) 1/29/16

Carole Makela, Chair  
Yvonne Bridgeman, Secretary

A regular meeting of the University Curriculum Committee was held on January 29, 2016, at 2:00 p.m.

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

Curriculum Liaison Specialist: Shelly Ellerby.

Guests: Yvonne Bridgeman, Kelley Brundage, Linda Selkirk.

Absent: Graduate representative Allistair Cook.

### **Minutes**

The Minutes of January 22, 2016 were approved.

### **Experimental Course Report**

Experimental Course Report was received.

### **Consent Agenda**

There was no Consent Agenda, January 1/29/16.

### **New Courses**

### ***Effective Date***

#### **CS 163 04(3-1-0). Java (CS1) No Prior Programming F, S, SS.**

Fall 2016

Prerequisite: MATH 124 with a C or better.

Restriction: Must register for lecture and laboratory.

Registration Information: Credit allowed for only one of the following courses: CS 160, CS 163, or CS 164.

Computer programming in Java for students without previous programming experience. Topics include variables, assignment, expressions, operators, booleans, conditionals, characters and strings, control loops, arrays, objects and classes, file input/output, interfaces, recursion, lists, and sorting.

#### **CS 164 04(3-1-0). Java (CS1) Prior Programming F, S.**

Fall 2016

Prerequisite: MATH 124 with a C or better.

Restriction: Must register for lecture and laboratory.

Registration Information: Credit allowed for only one of the following courses: CS 160, CS 163, or CS 164.

Computer programming in Java for students with limited programming experience. Problem decomposition for good design; expressions, operators, booleans, conditionals, characters and strings, control loops, arrays, objects and classes, file input/output, interfaces, recursion, lists, and sorting.

#### **ENGR 382A 03(0-0-3). Study Abroad: Grand Challenges in Engineering SS.**

Summer 2016

Prerequisite: None.

Restriction: None.

Registration Information:

Faculty-led study abroad program that includes cultural, language, and engineering instruction. Course will be held at a host institution in China.

**Major Change to Curricula**

**Warner College of Natural Resources  
Department of Ecosystem Science and Sustainability  
BS in Watershed Science**

**Effective Fall 2016**

**FRESHMAN**

		<b>AUCC</b>	<b>CREDITS</b>
Select one course from the following:			
<u>BUS 150</u>	Business Computing Concepts and Applications		3
<u>CS 110</u>	Personal Computing		4
Select one course from the following:			
<u>BZ 110</u> & <u>BZ 111</u>	Principles of Animal Biology (GT-SC2)	3A	3 1
<u>BZ 120</u>	Principles of Plant Biology (GT-SC2)	3A	4
<u>LIFE 102</u>	Attributes of Living Systems (GT-SC1)	3A	4
<u>LIFE 103</u> <sup>1</sup>	Biology of Organisms-Animals and Plants		4
Select one group from the following:			
Group A:			
<u>CHEM 107</u>	Fundamentals of Chemistry (GT-SC2)	3A	4
<u>CHEM 108</u>	Fundamentals of Chemistry Laboratory (GT-SC1)	3A	1
Group B:			
<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
<u>ESS 130</u>	System Theory and Information Management		1
Select one course from the following:			
<u>GEOL 120</u>	Exploring Earth: Physical Geology (GT-SC2)	3A	3
<u>GEOL 122</u>	The Blue Planet: Geology of Our Environment (GT-SC2)	3A	3
<u>GEOL 124</u>	Geology of Natural Resources (GT-SC2)	3A	3
<u>GEOL 150</u>	Physical Geology for Scientists and Engineers		4
Select one course from the following:			
<u>MATH 155</u>	Calculus for Biological Scientists I (GT-MA1)	1B	4
<u>MATH 160</u>	Calculus for Physical Scientists I (GT-MA1)	1B	4
<u>Arts and Humanities</u>		3B	3
<u>Global and Cultural Awareness</u>		3E	3
<b>Total Credits</b>			<b>29-31</b>

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## SOPHOMORE

Select one course from the following:			
<u>CO 301B</u>	Writing in the Disciplines: Sciences (GT-CO3)	2	3
<u>JTC 300</u>	Professional and Technical Communication (GT-CO3)	2	3
<u>LB 300</u>	Specialized Professional Writing	2	3
<u>ESS 210/GR 210</u>	Physical Geography		3
<u>GR 304/WR 304</u>	Sustainable Watersheds	3A	3
Select one course from the following:			
<u>ESS 211</u>	Foundations in Ecosystem Science		3
<u>LIFE 320</u>	Ecology		3
Select one course from the following:			
<u>MATH 161</u>	Calculus for Physical Scientists II (GT-MA1)	1B	4
<u>MATH 255</u>	Calculus for Biological Scientists II (GT-MA1)	1B	4
<u>NR 322</u>	Introduction to Geographic Information Systems		4
Select one course from the following:			
<u>PH 121</u>	General Physics I (GT-SC1)	3A	5
<u>PH 141</u>	Physics for Scientists and Engineers I (GT-SC1)	3A	5
<u>SOCR 240</u>	Introductory Soil Science		4
<b>Total Credits</b>			<b>29</b>

## SUMMER

<u>NR 220</u>	Natural Resource Ecology and Measurements		5
<b>Total Credits</b>			<b>5</b>

## JUNIOR

<u>AREC 342</u>	Water Law, Policy, and Institutions		3
<u>ESS 330</u>	Quantitative Reasoning for Ecosystem Science		3
<u>SOCR 470</u>	Soil Physics		3
<u>SOCR 471</u>	Soil Physics Laboratory		1
<u>STAT 301 or 315</u>	Introduction to Statistical Methods Statistics for Engineers and Scientists		3
<u>WR 418<sup>2</sup></u>	Land Use and Water Quality		3
<u>WR 419</u>	Water Quality Laboratory for Wildland Managers		2
Watershed Science Department List selection (select 3 credits from list below) <sup>3</sup>			3
<u>Arts and Humanities</u>		3B	3
<u>Historical Perspectives</u>		3D	3
<u>Social and Behavioral Sciences</u>		3C	3
<b>Total Credits</b>			<b>30</b>

**SENIOR**

Select one course from the following:

<u>SOCR 322</u>	Principles of Microclimatology	3
<u>WR 474</u>	Snow Hydrology	3
<u>WR 416</u> <sup>2</sup>	Land Use Hydrology	4B 3
<u>WR 417</u> <sup>2</sup>	Watershed Measurements	3
<u>WR 440</u>	Watershed Problem Analysis	4A,4B,4C 3
<u>WR 486</u>	Watershed Field Practicum	2
Watershed Science Department List selection (select 9 credits from list below) <sup>3</sup>		<u>69</u>
Electives <sup>4</sup>		<u>5-72-4</u>

**Total Credits** **25-27**

**Program Total Credits:** **120**

**Watershed Science Department List**

Code	Title	Credits
<b>Earth Sciences</b>		
<u>ATS 350</u>	Introduction to Weather and Climate	2
<u>ATS 351</u>	Introduction to Weather and Climate Laboratory	1
<u>CIVE 322</u>	Basic Hydrology	3
<u>CIVE 413</u>	Environmental River Mechanics	3
<u>CIVE 423</u>	Groundwater Engineering	3
<u>CIVE 425</u>	Soil and Water Engineering	3
<u>CIVE 440</u>	Nonpoint Source Pollution	3
<u>GEOL 452</u>	Hydrogeology	4
<u>GEOL 454</u>	Geomorphology	4
<u>GR 323/NR 323</u>	Remote Sensing and Image Interpretation	3
<u>NR 422</u>	GIS Applications in Natural Resource Management	4
<u>SOCR 322</u>	Principles of Microclimatology	3
<u>SOCR 440</u>	Pedology	4
<u>WR 406</u>	Seasonal Snow Environments	3
<u>WR 474</u>	Snow Hydrology	3
<b>Ecology</b>		
<u>BSPM 445</u>	Aquatic Insects	4
<u>BZ 440</u>	Plant Physiology	3
<u>BZ 441</u>	Plant Physiology Laboratory	2
<u>BZ 471</u>	Stream Biology and Ecology	3
<u>BZ 472</u>	Stream Biology and Ecology Laboratory	1



Code	Title	Credits
<u>BZ 474</u>	Limnology	3
<u>CIVE 330</u>	Ecological Engineering	3
<u>ESS 311</u>	Ecosystem Ecology	3
<u>ESS 411</u>	Earth Systems Ecology	3
<u>RS 478</u>	Ecological Restoration	3
<b>Sustainability</b>		
<u>AREC 442</u>	Water Resource Economics	3
<u>ESS 400</u>	Sustainability and Ecosystem Science	3
<u>NR 310</u>	Ecosystem Services and Human Well-Being	3
<u>NR 320</u>	Natural Resources History and Policy	3
<u>NRRT 330</u>	Social Aspects of Natural Resource Management	3
<u>NRRT 362</u>	Environmental Conflict Management	3
<u>SOC 461</u>	Water, Society, and Environment	3

- <sup>1</sup> ~~LIFE 102 or equivalent is required to take LIFE 103. In order to take this course, students may need to obtain a registration override from the appropriate department.~~
- <sup>2</sup> Partially satisfies requirements of the Water Resources Interdisciplinary Studies Program.
- <sup>3</sup> Select courses not taken elsewhere in the program from the Watershed Science Department List, for a program minimum total of 9 ~~42~~ credits.
- <sup>4</sup> 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).



College of Natural Sciences  
Department of Computer Science  
BS in Applied Computing Technology  
Human Centered Computing Concentration

Effective Fall 2016

## FRESHMAN

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>CS 160</u>	<del>Foundations in Programming</del>	-	4
<u>CS 161</u>	<del>Object-Oriented Problem Solving</del>	-	4
<u>CS 192</u>	First-Year Seminar-Computer Science		2
Select one course from the following:		-	
<u>CS 163</u>	Java (CS1) No Prior Programming	-	<u>4</u>
<u>CS 164</u>	Java (CS1) Prior Programming	-	<u>4</u>
<u>CS 165</u>	Java – Data Structures and Algorithms	-	<u>4</u>
<u>MATH 160</u>	Calculus for Physical Scientists I (GT-MA1)	1B	4

<u>PSY 100</u>	General Psychology (GT-SS3)	3C	3
<u>Biological and Physical Sciences</u>		3A	4
<u>Global and Cultural Awareness</u>		3E	3
Electives <sup>1</sup>			3
<b>Total Credits</b>			<b>30</b>

## SOPHOMORE

<u>CS 200</u>	Algorithms and Data Structures	-	4
<u>CS 253</u>	Software Development with C++		4
<u>CS 220</u>	Discrete Structures and their Applications	-	4
<u>CS 270</u>	Computer Organization		4
<u>MATH 161</u>	Calculus for Physical Scientists II (GT-MA1)	1B	4
<u>MATH 229</u>	Matrices and Linear Equations		2
<u>PSY 250</u>	Research Methods in Psychology		4
<u>PSY 252</u>	Mind, Brain, and Behavior		3
<u>Advanced Writing</u>		2	3
<u>Biological and Physical Sciences</u>		3A	3
<b>Total Credits</b>			<b>31</b>

## JUNIOR

<u>CS 320</u>	Algorithms--Theory and Practice		3
<u>CS 464</u>	Principles of Human-Computer Interaction	4A,4B,4C	4
<u>CT 310</u>	Web Development		4

Select 3-6 credits from the following:

<u>STAT 311</u>	Statistics for Behavioral Sciences I		3
<u>&amp; STAT 312</u>			3

OR

<u>STAT 315</u>	Statistics for Engineers and Scientists	4B	3
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<u>Arts and Humanities</u>		3B	3
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<u>Historical Perspectives</u>		3D	3
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Upper-Division Electives			3
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Electives			3-6
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<b>Total Credits</b>			<b>29</b>
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## SENIOR

<u>CS 410</u>	Introduction to Computer Graphics		4
<u>CS 440</u>	Introduction to Artificial Intelligence	4A,4C	4
<u>PSY 452</u>	Cognitive Psychology		3
<u>PSY 456</u>	Sensation and Perception		3

<u>PSY 453</u> or <u>457</u>	Cognitive Psychology Laboratory Sensation and Perception Laboratory	2
<u>Arts and Humanities</u>	3B	3
Upper-Division Electives <sup>1</sup>		6-9
Electives		2-5
<b>Total Credits</b>		<b>30</b>

**Program Total Credits: 120**

<sup>1</sup> 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).



**College of Natural Sciences  
Department of Computer Science  
Minor in Computer Science**

**Effective Fall 2016**

A minimum grade of C is required in all courses required for the minor, and their prerequisites.

Code	Title	Credits
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**Lower Division**

<u>CS 160</u>	Foundations in Programming	4
<u>CS 161</u>	Object-Oriented Problem Solving	4
<u>CS 200</u>	Algorithms and Data Structures	4

Select one course from the following:

<u>CS 163</u>	Java (CS1) No Prior Programming	4
<u>CS 164</u>	Java (CS1) Prior Programming	4
<u>CS 165</u>	Java – Data Structures and Algorithms	4
<u>CS 220</u>	Discrete Structures and their Applications	4
<u>CS 270</u>	Computer Organization	4

**Upper Division**

<u>CS***</u>	Courses numbered 300- or above	12
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**Program Total Credits 28**



**College of Natural Sciences  
Department of Mathematics  
Minor in Mathematics**

**Effective Fall 2016**

A minimum grade of C is required in all mathematics, statistics, and computer science each MATH, STAT, and CS courses required for the minor in mathematics.

Code	Title	Credits
Select one group from the following:		8
Group A:		
<u>MATH 155</u>	Calculus for Biological Scientists I (GT-MA1)	
<u>MATH 255</u>	Calculus for Biological Scientists II (GT-MA1)	
Group B:		
<u>MATH 160</u>	Calculus for Physical Scientists I (GT-MA1)	
<u>MATH 161</u>	Calculus for Physical Scientists II (GT-MA1)	
Group C:		
<u>MATH 160</u>	Calculus for Physical Scientists I (GT-MA1)	
<u>MATH 271</u>	Applied Mathematics for Chemists I	
Electives in computer science, mathematics, or statistics <sup>-2</sup> Choose 6-7 credits from the following: <sup>1</sup>		6-7
Upper-division (300- to 400- level) courses in MATH, STAT, or CS		
<u>MATH 229</u>	Matrices and Linear Equations	
<u>MATH 261</u>	Calculus for Physical Scientists III	
<u>MATH 272</u>	Applied Mathematics for Chemists II	
Upper-Division Mathematics Electives (300- 400- level MATH courses) <sup>+ 2</sup>		9
<b>Program Total Credits</b>		<b>23</b>

**Course List**

<sup>1</sup> Choose from MATH 229 or MATH 261 or MATH 272 or upper-division courses in mathematics, statistics, or computer science. At least 3 credits must be from the upper-division (300- to 400-level) courses.

<sup>2</sup> Courses ending in -80 and to -99 cannot be used to satisfy upper-division (300- to 400-level) requirements.



**Intra-University  
Interdisciplinary Minor in Arabic Studies**

**Effective Fall 2016**

A grade of C or better is required in each course that will count toward the interdisciplinary minor.

Lower Division Language <sup>1</sup>		8-18
<u>LARA 105</u>	First-Year Arabic I	5
<u>LARA 107</u>	First-Year Arabic II	5
<u>LARA 200</u>	Second-Year Arabic I (GT-AH4)	4
<u>LARA 201</u>	Second-Year Arabic II (GT-AH4)	4

**Lower Division Electives <sup>1</sup>** **0-9**

<u>HIST 115</u>	The Islamic World: Late Antiquity to 1500	3
<u>PHIL 172</u>	Religions of the East	3
<u>LARA 250</u>	Arabic Language, Literature, Culture in Translation (GT-AH2)	3

**Upper-division Electives**

Select at least 12 credits from at least two different disciplines:

<u>HIST 303</u>	Hellenistic World: Alexander to Cleopatra	3
<u>HIST 308</u>	Ancient Christianity to 500 A.D.	3
<u>HIST 421</u>	Africa: Colonialism to Independence	3
<u>HIST 422</u>	Modern Africa	3
<u>HIST 430</u>	Ancient Near East	3
<u>HIST 431</u>	Ancient Israel	3
<u>HIST 432</u>	Sacred History in the Bible and the Qur'an	3
<u>HIST 433</u>	Muhammad and the Origins of Islam	3
<u>HIST 435</u>	Jihad and Reform in Islamic History	3
<u>HIST 438</u>	The Modern Middle East	3
<u>HIST 469</u>	The Crusades	3
<u>LARA 300</u>	Third Year Arabic	3
<u>LARA 301</u>	Oral Communication - Arabic	3
<u>POLS 449</u>	Middle East Politics	3
<u>PHIL 335</u>	Islam: Cosmology and Practice	3
<u>PHIL 379</u>	Mysticism East and West	3
<u>PHIL 455</u>	Islamic Philosophy	3

**Program Total Credits** **21**

<sup>1</sup> LARA 200 and LARA 201 are required. Students placed out of or directly into LARA 201 need to replace 5-9 lower division credits from the list of lower-division electives. A maximum of 9 lower-division credits may be counted for the minor.



**Approved Subject Code Change**

Request to change subject code RRM, Restaurant and Resort Management to HM, Hospitality Management was approved, Department of Food Science and Human Nutrition.

The meeting adjourned at 3:05 p.m.

(D)

Carole Makela, Chair  
Shelly Ellerby, Curriculum Liaison Specialist

A regular meeting of the University Curriculum Committee was held on February 5, 2016, at 2:00 p.m.

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

Curriculum Liaison Specialist: Shelly Ellerby.

Guests: Katie Risheill.

Absent: Graduate representative Allistair Cook.

## Minutes

The Minutes of January 29, 2016 were approved.

## Experimental Course Report

None.

## Consent Agenda

None.

## New Courses

## *Effective Date*

### **BUS 636 03(3-0-0). Economics of Ecosystems and Biodiversity F.**

Fall 2016

Prerequisite: None.

Registration Information: Admission to the Global Social and Sustainable Enterprise MBA program.

Economic theories and analytical frameworks are developed and applied to the use, protection and management of the natural environment.

### **SPCM 320 03(3-0-0). Communication: Human Anti-Trafficking S.**

Fall 2016

Prerequisite: 3 credits of SPCM or 3 credits of AUCC Category 3B.

Registration Information: Sophomore standing.

Examines historical and contemporary anti human trafficking movements, assessing the communication strategies employed by anti-trafficking advocates and organizations. Assesses the role language plays in shaping societal attitudes toward victims, survivors, and perpetrators of human trafficking.

## Major Change to Courses

### **JTC 100 03(3-0-0). Media in Society (GT-SS3) F, S.**

Fall 2016

Prerequisite: None.

Registration Information: Sections may be offered: Online.

Role of media in American democracy; impact of media on individuals and society.

### **VM 616 8 9(45-98-1) Functional Anatomy F.**

Fall 2016

Prerequisite: None.

Registration Information: Admission to the Professional Veterinary Medicine Program.

Intensive study of the gross anatomy of domestic animals. Anatomy studied comprises canine, feline, bovine, equine, small ruminant, and porcine species. Emphasis is on canine and equine anatomy. Comparative understanding of the anatomy of organ systems that will support clinical instruction in the professional curriculum. ~~Embryonic development and organogenesis are incorporated to improve understanding of normal anatomy and common developmental pathologies~~

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**Major Change to Curricula**

College of Engineering

Effective Fall 2016

BS in Biomedical Engineering with CB

Dual Degree Program: Biomedical Engineering and Chemical and Biological Engineering

**FRESHMAN**

		AUCC	CREDITS
<u>BIOM 101</u>	Introduction to Biomedical Engineering		3
<u>CBE 101</u>	Chemical and Biological Engineering I		3
<u>CBE 102</u>	Chemical and Biological Engineering II	-	3
<u>CBE 160</u>	MATLAB for Chemical and Biological Eng		1
<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>LIFE 102</u>	Attributes of Living Systems (GT-SC1)	3A	4
<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 <sup>1</sup>			0
<b>Total Credits</b>			<b>32</b>

**SOPHOMORE**

<u>CBE 201</u>	Material and Energy Balances		3
<u>CBE 205</u>	Introduction to Biological Engineering		3
<u>CBE 210</u>	Thermodynamic Process Analysis		3
<u>CHEM 114</u>	General Chemistry Lab II		1
<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>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>LIFE 102</u>	Attributes of Living Systems (GT-SC1)	3A	4
<u>MATH 261</u>	Calculus for Physical Scientists III		4
<u>MATH 340</u>	Introduction to Ordinary Differential Equations		4
<u>PH 142</u>	Physics for Scientists and Engineers II (GT-SC1)	3A	5
Additional Requirements for Graduation <sup>1</sup>			0
<b>Total Credits</b>			<b>34</b>

**JUNIOR**

97

<u>BC 351</u>	Principles of Biochemistry		4
<u>BIOM 300</u>	Problem-Based Learning Biomedical Engr Lab		4
<u>BIOM 330</u>	Transport Phenomena in Biomedical Engineering	-	3
<u>BMS 300</u>	Principles of Human Physiology		4
<u>CBE 310</u>	Molecular Concepts and Applications		3
<u>CBE 320</u>	Chemical and Biological Reactor Design		3
<u>CBE 330</u>	Process Simulation		3
<u>CBE 331</u>	Momentum Transfer and Mechanical Separations		3
<u>CBE 332</u>	Heat and Mass Transfer Fundamentals		3
<u>CBE 333</u>	Chemical and Biological Engineering Lab I	-	2
<u>CBE 493</u>	Professional Development Seminar		1
<u>LIFE 210</u>	Introductory Eukaryotic Cell Biology		3
<u>Social and Behavioral Sciences</u>		3C	3
Additional Requirements for Graduation <sup>1</sup>			0
<b>Total Credits</b>			<b>34</b>

## SENIOR

<u>BIOM 400</u>	Kinetics of Biomolecular and Cellular Systems	-	3
<u>CBE 430</u>	Process Control and Instrumentation	-	3
<u>BIOM 330</u>	Transport Phenomena in Biomedical Engineering		3
<u>BIOM 422</u>	Kinetics of Biomolecular and Cellular Systems		3
<u>CBE 333</u>	Chemical and Biological Engineering Lab I		2
<u>CBE 442</u>	Separation Processes		4
<u>CBE 443</u>	Chemical and Biological Engineering Lab II		2
<u>CBE 451</u>	Chemical and Biological Engineering Design I		3
<u>MECH 262</u>	Engineering Mechanics		4
<u>STAT 315</u>	Statistics for Engineers and Scientists		3
<u>Arts and Humanities</u>		3B	3
<u>Historical Perspectives</u>		3D	3
<u>Social and Behavioral Sciences</u>		3C	3
Technical Elective <sup>2</sup>		-	3
Additional Requirements for Graduation <sup>1</sup>			0
<b>Total Credits</b>			<b>30</b>

## FIFTH YEAR

<u>BIOM 486A</u>	Biomedical Design Practicum: Capstone Design I	4A,4B,4C	4
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<u>BIOM 486B</u>	Biomedical Design Practicum: Capstone Design II	4A,4B,4C	4
<u>CBE 451</u>	Chemical and Biological Engineering Design I	-	3
<u>CBE 493</u>	Professional Development Seminar	-	1
<u>CBE 430</u>	Process Control and Instrumentation		3
<u>Advanced Writing</u>		2	3
<u>Arts and Humanities</u>		3B	3
<u>Global and Cultural Awareness</u>		3E	3
BME Technical Elective <sup>2</sup>			3
CBE BIOM Technical Elective <sup>3</sup>			5 3
Additional Requirements for Graduation <sup>1</sup>			0
<b>Total Credits</b>			<b>28</b>
<b>Program Total Credits:</b>			<b>158</b>

### Approved BME Technical Electives for BME-CBE BS Program

Code	Title	Credits
Select 3 credits from the following:		
<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>BC 463</u>	Molecular Genetics	3
<u>BC 465</u>	Molecular Regulation of Cell Function	3
<u>BC 565</u>	Molecular Regulation of Cell Function	4
<u>BIOM 441</u>	Biomechanics and Biomaterials	3
<u>BIOM 470/MECH 470</u>	Biomedical Engineering	3
<u>BIOM 476A</u>	Biomedical Clinical Practicum I	2
<u>BIOM 476B</u>	Biomedical Clinical Practicum II	4
<u>BIOM 504/CBE 504</u>	Fundamentals of Biochemical Engineering	3
<u>BIOM 525/MECH 525</u>	Cell and Tissue Engineering	3
<u>BIOM 526/ECE 526</u>	Biological Physics	3
<u>BIOM 531/MECH 531</u>	Materials Engineering	3
<u>BIOM 533/CIVE 533</u>	Biomolecular Tools for Engineers	3
<u>BIOM 543/CBE 543</u>	Membranes for Biotechnology and Biomedicine	3
<u>BIOM 573/MECH 573</u>	Structure and Function of Biomaterials	3
<u>BMS 301</u>	Human Gross Anatomy	5
<u>BMS 302</u>	Laboratory in Principles of Physiology	2
<u>BMS 325</u>	Cellular Neurobiology	3
<u>BMS 345</u>	Functional Neuroanatomy	4
<u>BMS 405</u>	Nerve and Muscle-Toxins, Trauma and Disease	3

Code	Title	Credits
<u>BMS 420</u>	Cardiopulmonary Physiology	3
<u>BMS 430</u>	Endocrinology	3
<u>BMS 450</u>	Pharmacology	3
<u>BMS 500</u>	Mammalian Physiology I	4
<u>BMS 501</u>	Mammalian Physiology II	4
<u>BMS 503/NB 503</u>	Developmental Neurobiology	3
<u>BMS 505/NB 505</u>	Neuronal Circuits, Systems and Behavior	3
<u>BZ 311</u>	Developmental Biology	4
<u>BZ 350</u>	Molecular and General Genetics	4
<u>BZ 476/BZ 576</u>	Genetics of Model Organisms	3
<u>CBE 543</u>	Membranes for Biotechnology and Biomedicine	3
<u>CHEM 334</u>	Quantitative Analysis Laboratory	1
<u>CHEM 335</u>	Introduction to Analytical Chemistry	3
<u>CHEM 433</u>	Clinical Chemistry	3
<u>CHEM 539A</u>	Principles of NMR and MRI: Basic NMR Principles	1
<u>CHEM 539B</u>	Principles of NMR and MRI: NMR Diffusion Measurements-2D NMR and MRI	1
<u>CHEM 539C</u>	Principles of NMR and MRI: Advanced NMR and MRI Techniques	1
<u>CM 501</u>	Advanced Cell Biology	4
<u>CM 502/NB 502</u>	Techniques in Molecular & Cellular Biology	2
<u>ECE 569/MECH 569</u>	Micro-Electro-Mechanical Devices	3
<u>ERHS 450</u>	Introduction to Radiation Biology	3
<u>ERHS 502</u>	Fundamentals of Toxicology	3
<u>ERHS 510</u>	Cancer Biology	3
<u>HES 307</u>	Biomechanical Principles of Human Movement	3
<u>HES 319</u>	Neuromuscular Aspects of Human Movement	3
<u>HES 403</u>	Physiology of Exercise	4
<u>HES 405</u>	Exercise Testing Instrumentation	2
<u>HES 476</u>	Exercise and Chronic Disease	3
<u>MATH 455</u>	Mathematics in Biology and Medicine	3
<u>MECH 543</u>	Biofluid Mechanics	3
<u>MECH 569</u>	Micro-Electro-Mechanical Devices	3
<u>MIP 300</u>	General Microbiology	3
<u>MIP 302</u>	General Microbiology Laboratory	2
<u>MIP 342</u>	Immunology	4
<u>MIP 343</u>	Immunology Laboratory	2
<u>MIP 351</u>	Medical Bacteriology	3
<u>MIP 352</u>	Medical Bacteriology Laboratory	3

Code	Title	Credits
<u>MIP 420</u>	Medical and Molecular Virology	4
<u>MIP 436</u>	Industrial Microbiology	4
<u>MIP 443</u>	Microbial Physiology	4
<u>MIP 450</u>	Microbial Genetics	3
<u>MIP 576/BSPM 576</u>	Bioinformatics	3
<u>NB 500</u>	Readings in Cellular Neurobiology	1
<u>NB 501</u>	Cellular and Molecular Neurophysiology	2
<u>NB 503</u>	Developmental Neurobiology	3
<u>NB 505</u>	Neuronal Circuits, Systems and Behavior	3

Course List

**Approved CBE Technical Electives for BME-CBE BS Program**

Code	Title	Credits
Select 5 credits from the following:		
<u>AA 301</u>	Astrophysics I	5
<u>AA 302</u>	Astrophysics II	5
<u>AA 303</u>	Astrophysics III	5
<u>ATS 555</u>	Air Pollution	3
<u>ATS 560</u>	Air Pollution Measurement	2
<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 463</u>	Molecular Genetics	3
<u>BC 465</u>	Molecular Regulation of Cell Function	3
<u>BIOM 470/MECH 470</u>	Biomedical Engineering	3
<u>BIOM 476A</u>	Biomedical Clinical Practicum I	2
<u>BIOM 476B</u>	Biomedical Clinical Practicum II	4
<u>BIOM 525/MECH 525</u>	Cell and Tissue Engineering	3
<u>BIOM 532/MECH 532</u>	Material Issues in Mechanical Design	3
<u>BIOM 533/CIVE 533</u>	Biomolecular Tools for Engineers	3
<u>BIOM 570/MECH 570</u>	Bioengineering	3
<u>BIOM 573/MECH 573</u>	Structure and Function of Biomaterials	3
<u>BMS 301</u>	Human Gross Anatomy	5
<u>BMS 302</u>	Laboratory in Principles of Physiology	2
<u>BMS 360</u>	Fundamentals of Physiology	4
<u>BMS 420</u>	Cardiopulmonary Physiology	3
<u>BMS 430</u>	Endocrinology	3
<u>BMS 450</u>	Pharmacology	3

Code	Title	Credits
<u>BMS 500</u>	Mammalian Physiology I	4
<u>BMS 501</u>	Mammalian Physiology II	4
<u>BSPM 302</u>	Applied and General Entomology	2
<u>BSPM 303A</u>	Entomology Laboratory: General	2
<u>BSPM 361</u>	Elements of Plant Pathology	3
<u>BSPM 450</u>	Molecular Plant-Microbe Interaction	3
<u>BZ 310</u>	Cell Biology	4
<u>BZ 311</u>	Developmental Biology	4
<u>BZ 346</u>	Population and Evolutionary Genetics	3
<u>BZ 348/MATH 348</u>	Theory of Population and Evolutionary Ecology	4
<u>BZ 350</u>	Molecular and General Genetics	4
<u>BZ 415</u>	Marine Biology	4
<u>BZ 440</u>	Plant Physiology	3
<u>BZ 441</u>	Plant Physiology Laboratory	2
<u>BZ 450</u>	Plant Ecology	4
<u>BZ 476/BZ 576</u>	Genetics of Model Organisms	3
<u>BZ 572</u>	Phytoremediation	3
<u>CBE 406</u>	Introduction to Transport Phenomena	3
<u>CBE 495</u>	Independent Study	1-18
<u>CBE 501</u>	Chemical Engineering Thermodynamics	3
<u>CBE 502</u>	Advanced Reactor Design	3
<u>CBE 503</u>	Transport Phenomena Fundamentals	3
<u>CBE 504/BIOM 504</u>	Fundamentals of Biochemical Engineering	3
<u>CBE 514</u>	Polymer Science and Engineering	3
<u>CBE 521</u>	Mathematical Modeling for Chemical Engineers	3
<u>CBE 522/BIOM 522</u>	Bioseparation Processes	3
<u>CBE 524</u>	Bioremediation	1
<u>CBE 540/CIVE 540</u>	Advanced Biological Wastewater Processing	3
<u>CBE 543/BIOM 543</u>	Membranes for Biotechnology and Biomedicine	3
<u>CHEM 261</u>	Fundamentals of Inorganic Chemistry	3
<u>CHEM 334</u>	Quantitative Analysis Laboratory	1
<u>CHEM 335</u>	Introduction to Analytical Chemistry	3
<u>CHEM 431</u>	Instrumental Analysis	4
<u>CHEM 433</u>	Clinical Chemistry	3
<u>CHEM 440</u>	Advanced Organic Chemistry Laboratory	2
<u>CHEM 461</u>	Inorganic Chemistry	3
<u>CHEM 462</u>	Inorganic Chemistry Laboratory	2

Code	Title	Credits
<u>CHEM 511</u>	Solid State Chemistry	3
<u>CHEM 515</u>	Polymer Chemistry	3
<u>CHEM 517</u>	Chemistry of Electronic Materials	3
<u>CHEM 537</u>	Electrochemical Methods	3
<u>CHEM 539A</u>	Principles of NMR and MRI: Basic NMR Principles	1
<u>CHEM 539B</u>	Principles of NMR and MRI: NMR Diffusion Measurements-2D NMR and MRI	1
<u>CHEM 539C</u>	Principles of NMR and MRI: Advanced NMR and MRI Techniques	1
<u>CHEM 543</u>	Structure/Mechanisms in Organic Chemistry	3
<u>CHEM 547</u>	Physical Organic Chemistry	3
<u>CHEM 551</u>	Organometallic Chemistry	3
<u>CHEM 565</u>	Inorganic Mechanisms	3
<u>CHEM 569</u>	Chemical Crystallography	3
<u>CHEM 570</u>	Chemical Bonding	3
<u>CHEM 571A</u>	Quantum Chemistry: Foundations	2
<u>CHEM 571B</u>	Quantum Chemistry: Electronic Structure	1
<u>CHEM 575</u>	Fundamentals of Chemical Thermodynamics	1
<u>CHEM 576</u>	Statistical Mechanics	2
<u>CHEM 577</u>	Surface Chemistry	3
<u>CHEM 579</u>	Chemical Kinetics	3
<u>CIVE 260</u>	Engineering Mechanics-Statics	3
<u>CIVE 261</u>	Engineering Mechanics-Dynamics	3
<u>CIVE 322</u>	Basic Hydrology	3
<u>CIVE 360</u>	Mechanics of Solids	3
<u>CIVE 401</u>	Hydraulic Engineering	3
<u>CIVE 413</u>	Environmental River Mechanics	3
<u>CIVE 423</u>	Groundwater Engineering	3
<u>CIVE 425</u>	Soil and Water Engineering	3
<u>CIVE 438</u>	Environmental Engineering Concepts	3
<u>CIVE 440</u>	Nonpoint Source Pollution	3
<u>CIVE 504</u>	Wind Engineering	3
<u>CIVE 520</u>	Physical Hydrology	3
<u>CIVE 531</u>	Groundwater Hydrology	3
<u>CIVE 538</u>	Aqueous Chemistry	3
<u>CIVE 540</u>	Advanced Biological Wastewater Processing	3
<u>CIVE 560</u>	Advanced Mechanics of Materials	3
<u>CM 501</u>	Advanced Cell Biology	4
<u>CM 502/NB 502</u>	Techniques in Molecular & Cellular Biology	2

Code	Title	Credits
<u>CS 160</u>	Foundations in Programming	4
<u>CS 161</u>	Object-Oriented Problem Solving	4
<u>CS 200</u>	Algorithms and Data Structures	4
<u>CS 270</u>	Computer Organization	4
<u>CS 420</u>	Introduction to Analysis of Algorithms	4
<u>ECE 204</u>	Introduction to Electrical Engineering	3
<u>ENGR 298</u>	Undergraduate Research	1-3
<u>ENGR 498</u>	Undergraduate Research	1-3
<u>ENGR 510</u>	Engineering Optimization: Method/Application	3
<u>ERHS 446</u>	Environmental Toxicology	3
<u>ERHS 448</u>	Environmental Contaminants: Exposure and Fate	3
<u>ERHS 450</u>	Introduction to Radiation Biology	3
<u>ERHS 502</u>	Fundamentals of Toxicology	3
<u>ERHS 510</u>	Cancer Biology	3
<u>ERHS 547</u>	Equipment and Instrumentation	3
<u>F 311</u>	Forest Ecology	3
<u>FTEC 447</u>	Food Chemistry	2
<u>FTEC 572</u>	Food Biotechnology	2
<u>GEOL 150</u>	Physical Geology for Scientists and Engineers	4
<u>GEOL 454</u>	Geomorphology	4
<u>HES 307</u>	Biomechanical Principles of Human Movement	3
<u>HES 319</u>	Neuromuscular Aspects of Human Movement	3
<u>HES 403</u>	Physiology of Exercise	4
<u>LIFE 201B</u>	Introductory Genetics: Molecular/Immunological/Developmental (GT-SC2)	3
<u>LIFE 202B</u>	Introductory Genetics Recitation: Molecular	1
<u>LIFE 203</u>	Introductory Genetics Laboratory	2
<u>LIFE 212</u>	Introductory Cell Biology Laboratory	2
<u>LIFE 320</u>	Ecology	3
<u>MATH 317</u>	Advanced Calculus of One Variable	4
<u>MATH 332</u>	Partial Differential Equations	3
<u>MATH 348</u>	Theory of Population and Evolutionary Ecology	4
<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 417</u>	Advanced Calculus I	3
<u>MATH 418</u>	Advanced Calculus II	3
<u>MATH 419</u>	Introduction to Complex Variables	3

Code	Title	Credits
<u>MATH 460</u>	Information and Coding Theory	3
<u>MATH 469</u>	Linear Algebra II	3
<u>MATH 501</u>	Combinatorics I	3
<u>MATH 502</u>	Combinatorics II	3
<u>MATH 510</u>	Linear Programming and Network Flows	3
<u>MATH 520</u>	Nonlinear Programming	3
<u>MATH 525</u>	Optimal Control	3
<u>MATH 530</u>	Mathematics for Scientists and Engineers	4
<u>MATH 532</u>	Mathematical Modeling of Large Data Sets	3
<u>MATH 545</u>	Partial Differential Equations I	3
<u>MATH 546</u>	Partial Differential Equations II	3
<u>MECH 307</u>	Mechatronics and Measurement Systems	4
<u>MECH 331</u>	Introduction to Engineering Materials	4
<u>MECH 431</u>	Metals and Alloys	3
<u>MECH 437</u>	Internal Combustion Engines	3
<u>MECH 460</u>	Aeronautics	3
<u>MECH 463</u>	Building Energy Systems	3
<u>MECH 468</u>	Space Propulsion and Power Engineering	3
<u>MECH 530</u>	Advanced Composite Materials	3
<u>MECH 531</u>	Materials Engineering	3
<u>MECH 558</u>	Combustion	3
<u>MECH 575</u>	Solar and Alternative Energies	3
<u>MIP 300</u>	General Microbiology	3
<u>MIP 302</u>	General Microbiology Laboratory	2
<u>MIP 334</u>	Food Microbiology	3
<u>MIP 335</u>	Food Microbiology Laboratory	2
<u>MIP 342</u>	Immunology	4
<u>MIP 343</u>	Immunology Laboratory	2
<u>MIP 350</u>	Microbial Diversity	3
<u>MIP 351</u>	Medical Bacteriology	3
<u>MIP 352</u>	Medical Bacteriology Laboratory	3
<u>MIP 420</u>	Medical and Molecular Virology	4
<u>MIP 432</u>	Microbial Ecology	3
<u>MIP 433</u>	Microbial Ecology Laboratory	1
<u>MIP 436</u>	Industrial Microbiology	4
<u>MIP 443</u>	Microbial Physiology	4
<u>MIP 450</u>	Microbial Genetics	3

Code	Title	Credits
<u>MIP 576/BSPM 576</u>	Bioinformatics	3
<u>MIP 578/BZ 578</u>	Genetics of Natural Populations	4
<u>NR 300</u>	Biological Diversity	3
<u>NR 322</u>	Introduction to Geographic Information Systems	4
<u>NR 323/GR 323</u>	Remote Sensing and Image Interpretation	3
<u>PH 314</u>	Introduction to Modern Physics	4
<u>PH 315</u>	Modern Physics Laboratory	2
<u>PH 341</u>	Mechanics	4
<u>PH 351</u>	Electricity and Magnetism	4
<u>PH 353</u>	Optics and Waves	4
<u>PH 361</u>	Physical Thermodynamics	3
<u>PH 451</u>	Introductory Quantum Mechanics I	3
<u>PH 452</u>	Introductory Quantum Mechanics II	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 541</u>	Classical Physics	3
<u>PH 551</u>	Modern 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>SOCR 240</u>	Introductory Soil Science	4
<u>SOCR 330</u>	Principles of Genetics	3
<u>SOCR 331</u>	Genetics Laboratory	1
<u>SOCR 455</u>	Soil Microbiology	3
<u>SOCR 456</u>	Soil Microbiology Laboratory	1
<u>SOCR 467</u>	Soil and Environmental Chemistry	3
<u>SOCR 470</u>	Soil Physics	3
<u>SOCR 471</u>	Soil Physics Laboratory	1
<u>SOCR 478</u>	Environmental Soil Sciences	3
<u>SOCR 479</u>	Environmental Soil Science Laboratory	1
<u>STAT 305</u>	Sampling Techniques	3
<u>STAT 340</u>	Multiple Regression Analysis	3
<u>STAT 350</u>	Design of Experiments	3
<u>STAT 372</u>	Data Analysis Tools	3
<u>STAT 420</u>	Probability and Mathematical Statistics I	3
<u>STAT 430</u>	Probability and Mathematical Statistics II	3



Code	Title	Credits
<u>STAT 511</u>	Design and Data Analysis for Researchers I	4
<u>STAT 512</u>	Design and Data Analysis for Researchers II	4

- <sup>1</sup> 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.
- <sup>2</sup> Select a total of 36 credits from Approved BME Technical Electives for BME-CBE Program. ~~courses with the BIOM or ECE subject code.~~
- <sup>3</sup> Select ~~53~~ credits from Approved CBE Technical Electives for BME-CBE Program. ~~courses with the BIOM subject code.~~



**College of Liberal Arts**  
**Department of Music, Theatre, and Dance**  
**BM in Music**  
**Composition Concentration**

**Effective Fall 2016**

A minimum grade of C is required in all music courses used to satisfy the requirements of the BM in Music, Composition Concentration.

**FRESHMAN**

	AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A 3
<u>MU 117</u>	Music Theory I	4
<u>MU 118</u>	Music Theory II	4
<u>MU 131</u>	Introduction to Music History and Literature (GT-AH1)	3B 3
<u>MU 150</u> <sup>1</sup>	Piano Class I	- 1
Select one group from the following: <sup>2+</sup>		
Group A:		
<u>MU 172A</u>	Freshman Voice Studio: English/Italian	2
<u>MU 172B</u>	Freshman Voice Studio: German, French	2
Group B:		
Applied Music Instruction - Lower-Division (see list below) <sup>3</sup>		2-4
Ensemble (see list below) <sup>3,2</sup>		2
<u>Historical Perspectives</u>	3D	3
<u>Mathematics</u>	1B	3
<u>Electives</u> <sup>4+</sup>	-	3-5/4-6
<b>Total Credits</b>		<b>30</b>

**SOPHOMORE**

<u>MU 217</u>	Music Theory III		4
<u>MU 218</u>	Music Theory IV		4
Applied Music Instruction - Lower-Division (see list below) <sup>2+</sup>			2
<u>MU 273</u>	Composition Instruction		2
Ensemble (see list below) <sup>32</sup>			2
<u>PSY 100</u>	General Psychology (GT-SS3)	3C	3
<u>Advanced Writing</u>		2	3
Electives			11
<b>Total Credits</b>			<b>31</b>

**JUNIOR**

<u>MU 254</u>	Beginning Conducting		2
<u>MU 317</u>	Music Theory V		2
<u>MU 318</u>	Arranging and Orchestration		2
<u>MU 334</u>	Music History I	4A,4B	3
<u>MU 335</u>	Music History II	4A,4B	3
Select one from the following:			
<u>MU 355</u>	Choral Conducting and Literature		2
<u>MU 356</u>	Instrumental Conducting and Literature		2
<u>MU 473</u>	Composition Instruction		<b>4</b>
<u>MU 499</u>	Thesis		1
Ensemble (see list below) <sup>32</sup>			2
<u>Arts and Humanities</u>		3B	3
Music Electives			3
Electives			2
<b>Total Credits</b>			<b>29</b>

**SENIOR**

<u>MU 417</u>	Counterpoint		3
<u>MU 418</u>	Advanced Orchestration		2
<u>MU 419</u>	Electronic Music Composition		2
<u>MU 471</u>	Recital	4C	1
<u>MU 473</u>	Composition Instruction		<b>4</b>
Ensemble (see list below) <sup>32</sup>			2
<u>Biological and Physical Sciences</u>		3A	7
<u>Global and Cultural Awareness</u>		3E	3
Electives <sup>5</sup>			6

**Total Credits** **30**

**Program Total Credits:** **120**

**Applied Music Instruction - Lower-Division**

<b>Code</b>	<b>Title</b>	<b>Credits</b>
<u>MU 272A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 272B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 272C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 272D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 272E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 272G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 272H</u>	Applied Music Instruction: Organ	1-2
<u>MU 272I</u>	Applied Music Instruction: Piano	1-2
<u>MU 272J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 272K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 272L</u>	Applied Music Instruction: Harp	1-2
<u>MU 272M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 272N</u>	Applied Music Instruction: Viola	1-2
<u>MU 272O</u>	Applied Music Instruction: Violin	1-2
<u>MU 272P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 272Q</u>	Applied Music Instruction: Voice	1-2
<u>MU 272R</u>	Applied Music Instruction: Bassoon	1-2
<u>MU 272S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 272T</u>	Applied Music Instruction: Flute	1-2
<u>MU 272U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 272V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

**Ensemble Courses**

<b>Code</b>	<b>Title</b>	<b>Credits</b>
<u>MU 201</u>	Men's Chorus	1
<u>MU 202</u>	University Chorus	1
<u>MU 204</u>	Marching Band	1
<u>MU 205</u>	Concert Band	1
<u>MU 206</u>	Colorado State University Concert Orchestra	1
<u>MU 300</u>	Women's Chorus	1
<u>MU 302</u>	University Orchestra	1
<u>MU 304</u>	Symphonic Band	1
<u>MU 305</u>	Colorado State University Concert Choir	1
<u>MU 309</u>	Jazz Ensemble	1
<u>MU 310</u>	Jazz Combo	1

Code	Title	Credits
<u>MU 400</u>	Colorado State University Chamber Choir	1
<u>MU 401</u>	Opera Theater	1-2
<u>MU 402</u>	Theater/Chamber Orchestra	1
<u>MU 404</u>	Symphonic Wind Ensemble	1
<u>MU 407</u>	Accompanying	1
<u>MU 408</u>	Chamber Music	1

- <sup>1</sup> ~~Students with previous keyboard experience may test out of MU 150 and replace with one elective credit. First-year voice students take MU 172A and MU 172B, then MU 272Q the second year for 2 semesters. Instrumentalists take MU 272A, MU 272P or MU 272R, MU 272V on a major instrument for 2 semesters each of the first 2 years.~~
- <sup>2</sup> ~~First-year voice students take MU 172A and MU 172B, then MU 272Q the second year for 2 semesters. Instrumentalists take MU 272A-MU 272P or MU 272R-MU 272V on a major instrument for 2 semesters each of the first 2 years. Students must participate in an ensemble during each semester in which they are enrolled in MU 172A, MU 172B, MU 272A, MU 272V, and MU 472A, MU 472V. At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience.~~
- <sup>3</sup> ~~Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience. Voice students take four credits of electives. Instrumentalists take six credits of electives.~~
- <sup>4</sup> ~~Voice students take three credits of electives. Instrumentalists take five credits of electives. 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).~~
- <sup>5</sup> ~~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).~~



**College of Liberal Arts**  
**Department of Music, Theatre, and Dance**  
**BM in Music**  
**Music Education Concentration, Choral Option**

**Effective Fall 2016**

A minimum grade of C is required in all music courses used to satisfy the requirements of the BM in Music, Music Education Concentration, Choral Option. Required EDUC courses must be completed with a minimum grade of C.

**FRESHMAN**

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>MU 117</u>	Music Theory I		4
<u>MU 118</u>	Music Theory II		4
<u>MU 131</u>	Introduction to Music History and Literature (GT-AH1)	3B	3
<u>MU 150</u> <sup>1</sup>	Piano Class I	-	<b>II</b>
<u>MU 151</u>	Piano Skills for Music Educators		1
<u>MU 172A</u>	Freshman Voice Studio: English/Italian		2
<u>MU 172B</u>	Freshman Voice Studio: German, French		2

<u>MU 286</u>	Practicum-Music Education		<b>3 1</b>
MU *** Ensemble (see list below) <sup>2+</sup>			2
<u>PSY 100</u>	General Psychology (GT-SS3)	3C	3
<u>Arts and Humanities</u>		3B	3
<u>Mathematics</u>		1B	3
<b>Total Credits</b>			<b>31</b>
<b>SOPHOMORE</b>			
<u>EDUC 275</u>	Schooling in the United States (GT-SS3)	3C	3
<u>EDUC 340</u>	Literacy and the Learner		3
<u>MU 152</u>	Piano Skills for Choral Directors		1
<u>MU 217</u>	Music Theory III		4
<u>MU 218</u>	Music Theory IV		4
Select one from the following:			
<u>MU 252A</u>	Instrumental Techniques: Brass		2
<u>MU 252B</u>	Instrumental Techniques: Woodwinds		2
<u>MU 254</u>	Beginning Conducting	-	2
<u>MU 252C</u>	Instrumental Techniques: Strings	-	1
Applied Music Instruction – Lower-Division (see list below)			2
MU *** Ensemble (see list below) <sup>2+</sup>			2
<u>Advanced Writing</u>		2	3
<u>Biological and Physical Sciences</u>		3A	43
<u>Historical Perspectives</u>		3D	3
<b>Total Credits</b>			<b>32</b>
<b>JUNIOR</b>			
<u>EDUC 331</u>	Educational Technology and Assessment		2
<u>EDUC 350</u>	Instruction I-Individualization/Management		3
<u>EDUC 386</u>	Practicum-Instruction I		1
<u>EDUC 474</u>	Elementary Music Methods I		2
<u>EDUC 475</u>	Elementary Music Methods II		2
<u>MU 252C</u>	Instrumental Techniques: Strings	-	1
<u>MU 254</u>	Beginning Conducting	-	2
<u>MU 317</u>	Music Theory V		2
<u>MU 318</u>	Arranging and Orchestration		2
<u>MU 334</u>	Music History I	4A,4B	3
<u>MU 335</u>	Music History II	4A,4B	3
<u>MU 355</u>	Choral Conducting and Literature		2
<u>MU 466</u>	Song Literature		2

Applied Music Instruction – Upper-Division (see list below)		2
MU *** Ensemble (see list below) <sup>2+</sup>		2
<u>Biological and Physical Sciences</u>	3A	34
<b>Total Credits</b>		<b>33</b>
<b>SENIOR</b>		
<u>EDUC 450</u>	Instruction II-Standards and Assessment	4
<u>EDUC 476</u>	Choral Methods for Secondary Schools	2
<u>EDUC 485A</u>	Student Teaching: Elementary	6
<u>EDUC 485B</u>	Student Teaching: Secondary	6
<u>EDUC 486E</u>	Practicum: Instruction II	1
<u>EDUC 493A</u>	Seminar: Professional Relations	1
<u>MU 425</u>	Jazz Pedagogy	2
<u>MU 467</u>	Vocal Pedagogy	2
<u>MU 471</u>	Recital	4C 1
Applied Music Instruction – Upper-Division (see list below)		1
MU *** Ensemble (see list below) <sup>2+</sup>		1
<u>Global and Cultural Awareness</u>	3E	3
<b>Total Credits</b>		<b>30</b>
<b>Program Total Credits:</b>		<b>126</b>

#### Applied Music Instruction - Lower-Division

Code	Title	Credits
<u>MU 272A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 272B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 272C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 272D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 272E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 272G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 272H</u>	Applied Music Instruction: Organ	1-2
<u>MU 272I</u>	Applied Music Instruction: Piano	1-2
<u>MU 272J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 272K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 272L</u>	Applied Music Instruction: Harp	1-2
<u>MU 272M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 272N</u>	Applied Music Instruction: Viola	1-2
<u>MU 272O</u>	Applied Music Instruction: Violin	1-2
<u>MU 272P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 272Q</u>	Applied Music Instruction: Voice	1-2

Code	Title	Credits
<u>MU 272R</u>	Applied Music Instruction: Bassoon	1-2
<u>MU 272S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 272T</u>	Applied Music Instruction: Flute	1-2
<u>MU 272U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 272V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

#### Applied Music Instruction - Upper-Division

Code	Title	Credits
<u>MU 472A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 472B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 472C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 472D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 472E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 472G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 472H</u>	Applied Music Instruction: Organ	1-2
<u>MU 472I</u>	Applied Music Instruction: Piano	1-2
<u>MU 472J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 472K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 472L</u>	Applied Music Instruction: Harp	1-2
<u>MU 472M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 472N</u>	Applied Music Instruction: Viola	1-2
<u>MU 472O</u>	Applied Music Instruction: Violin	1-2
<u>MU 472P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 472Q</u>	Applied Music Instruction: Voice	1-2
<u>MU 472R</u>	Applied Music Instruction: Bassoon	1-2
<u>MU 472S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 472T</u>	Applied Music Instruction: Flute	1-2
<u>MU 472U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 472V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

#### Ensemble Courses

Code	Title	Credits
<u>MU 201</u>	Men's Chorus	1
<u>MU 202</u>	University Chorus	1
<u>MU 204</u>	Marching Band	1
<u>MU 205</u>	Concert Band	1
<u>MU 206</u>	Colorado State University Concert Orchestra	1
<u>MU 300</u>	Women's Chorus	1

Code	Title	Credits
<u>MU 302</u>	University Orchestra	1
<u>MU 304</u>	Symphonic Band	1
<u>MU 305</u>	Colorado State University Concert Choir	1
<u>MU 309</u>	Jazz Ensemble	1
<u>MU 310</u>	Jazz Combo	1
<u>MU 400</u>	Colorado State University Chamber Choir	1
<u>MU 401</u>	Opera Theater	1-2
<u>MU 402</u>	Theater/Chamber Orchestra	1
<u>MU 404</u>	Symphonic Wind Ensemble	1
<u>MU 407</u>	Accompanying	1
<u>MU 408</u>	Chamber Music	1

<sup>1</sup> ~~Students with previous keyboard experience may test out of MU 150 and use the one credit for an elective. Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study this must be achieved by taking MU 408 or through another small ensemble experience.~~

<sup>2</sup> ~~Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study this must be achieved by taking MU 408 or through another small ensemble experience.~~



**College of Liberal Arts**  
**Department of Music, Theatre, and Dance**  
**BM in Music**  
**Music Education Concentration, Instrumental Option**

**Effective Fall 2016**

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**FRESHMAN**

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>MU 117</u>	Music Theory I		4
<u>MU 118</u>	Music Theory II		4
<u>MU 131</u>	Introduction to Music History and Literature (GT-AH1)	3B	3
<u>MU 150</u> <sup>1</sup>	Piano Class I	-	<b>1</b>
<u>MU 151</u>	Piano Skills for Music Educators		1
<u>MU 251</u>	Voice Techniques		1
<u>MU 252B</u>	Instrumental Techniques: Woodwinds		2
Applied Music Instruction – Lower-Division (see list below) <sup>2+</sup>			2



<u>MU 286</u>	Practicum-Music Education		<b>34</b>
MU *** Ensemble (see list below) <sup>3,2</sup>			2
<u>PSY 100</u>	General Psychology (GT-SS3)	3C	3
<u>Arts and Humanities</u>		3B	3
<u>Mathematics</u>		1B	3
<b>Total Credits</b>			<b>32</b>

## SOPHOMORE

<u>EDUC 275</u>	Schooling in the United States (GT-SS3)	3C	3
<u>EDUC 340</u>	Literacy and the Learner		3
<u>MU 217</u>	Music Theory III		4
<u>MU 218</u>	Music Theory IV		4
<u>MU 252A</u>	Instrumental Techniques: Brass		2
<u>MU 252C</u>	Instrumental Techniques: Strings		1
<u>MU 254</u>	Beginning Conducting	-	2
Applied Music Instruction – Lower-Division (see list below) <sup>2+</sup>			2
MU *** Ensemble (see list below) <sup>3,2</sup>			2
<u>Advanced Writing</u>		2	3
<u>Biological and Physical Sciences</u>		3A	43
<u>Historical Perspectives</u>		3D	3
<b>Total Credits</b>			<b>3132</b>

## JUNIOR

<u>EDUC 331</u>	Educational Technology and Assessment		2
<u>EDUC 350</u>	Instruction I-Individualization/Management		3
<u>EDUC 386</u>	Practicum-Instruction I		1
<u>EDUC 474</u>	Elementary Music Methods I		2
<u>EDUC 475</u>	Elementary Music Methods II		2
<u>MU 254</u>	Beginning Conducting	-	2
<u>MU 317</u>	Music Theory V		2
<u>MU 318</u>	Arranging and Orchestration		2
<u>MU 334</u>	Music History I	4A,4B	3
<u>MU 335</u>	Music History II	4A,4B	3
<u>MU 356</u>	Instrumental Conducting and Literature		2

Select one from the following:<sup>4,3</sup>

<u>MU 420</u>	Marching Band Techniques		2
<u>MU 421</u>	Orchestral Techniques		2

Applied Music Instruction – Upper-Division (see list below)<sup>2+</sup> 2

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MU *** Ensemble (see list below) <sup>32</sup>		2
<u>Biological and Physical Sciences</u>	3A	34
<b>Total Credits</b>		<b>3332</b>
<b>SENIOR</b>		
<u>EDUC 450</u>	Instruction II-Standards and Assessment	4
<u>EDUC 477</u>	Instrumental Methods for Secondary Schools	2
<u>EDUC 485A</u>	Student Teaching: Elementary	6
<u>EDUC 485B</u>	Student Teaching: Secondary	6
<u>EDUC 486E</u>	Practicum: Instruction II	1
<u>EDUC 493A</u>	Seminar: Professional Relations	1
<u>MU 252D</u>	Instrumental Techniques: Percussion	1
<u>MU 425</u>	Jazz Pedagogy	2
<u>MU 471</u>	Recital	4C 1
Applied Music Instruction – Upper-Division (see list below)		1
MU *** Ensemble (see list below) <sup>32</sup>		1
<u>Global and Cultural Awareness</u>	3E	3
Elective <sup>54</sup>		1
<b>Total Credits</b>		<b>30</b>
<b>Program Total Credits:</b>		<b>126</b>

#### Applied Music Instruction - Lower-Division

Code	Title	Credits
<u>MU 272A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 272B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 272C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 272D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 272E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 272G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 272H</u>	Applied Music Instruction: Organ	1-2
<u>MU 272I</u>	Applied Music Instruction: Piano	1-2
<u>MU 272J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 272K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 272L</u>	Applied Music Instruction: Harp	1-2
<u>MU 272M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 272N</u>	Applied Music Instruction: Viola	1-2
<u>MU 272O</u>	Applied Music Instruction: Violin	1-2
<u>MU 272P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 272Q</u>	Applied Music Instruction: Voice	1-2

Code	Title	Credits
<u>MU 272R</u>	Applied Music Instruction: Bassoon	1-2
<u>MU 272S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 272T</u>	Applied Music Instruction: Flute	1-2
<u>MU 272U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 272V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

### Applied Music Instruction - Upper-Division

Code	Title	Credits
<u>MU 472A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 472B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 472C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 472D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 472E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 472G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 472H</u>	Applied Music Instruction: Organ	1-2
<u>MU 472I</u>	Applied Music Instruction: Piano	1-2
<u>MU 472J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 472K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 472L</u>	Applied Music Instruction: Harp	1-2
<u>MU 472M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 472N</u>	Applied Music Instruction: Viola	1-2
<u>MU 472O</u>	Applied Music Instruction: Violin	1-2
<u>MU 472P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 472Q</u>	Applied Music Instruction: Voice	1-2
<u>MU 472R</u>	Applied Music Instruction: Bassoon	1-2
<u>MU 472S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 472T</u>	Applied Music Instruction: Flute	1-2
<u>MU 472U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 472V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

### Ensemble Courses

Code	Title	Credits
<u>MU 201</u>	Men's Chorus	1
<u>MU 202</u>	University Chorus	1
<u>MU 204</u>	Marching Band	1
<u>MU 205</u>	Concert Band	1
<u>MU 206</u>	Colorado State University Concert Orchestra	1
<u>MU 300</u>	Women's Chorus	1
<u>MU 302</u>	University Orchestra	1

Code	Title	Credits
<u>MU 304</u>	Symphonic Band	1
<u>MU 305</u>	Colorado State University Concert Choir	1
<u>MU 309</u>	Jazz Ensemble	1
<u>MU 310</u>	Jazz Combo	1
<u>MU 400</u>	Colorado State University Chamber Choir	1
<u>MU 401</u>	Opera Theater	1-2
<u>MU 402</u>	Theater/Chamber Orchestra	1
<u>MU 404</u>	Symphonic Wind Ensemble	1
<u>MU 407</u>	Accompanying	1
<u>MU 408</u>	Chamber Music	1

- <sup>1</sup> Students with previous keyboard experience may test out of MU 150 and use the one credit for an elective. Major instrument; two semesters except senior year.
- <sup>2</sup> Major instrument; two semesters except senior year. Students must participate in an ensemble during each semester in which they are enrolled in ~~MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V.~~ At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience. Wind and percussion majors must take MU 204 twice during their four year program.
- <sup>3</sup> Students must participate in an ensemble during each semester in which they are enrolled in ~~MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V.~~ At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience. Wind and percussion majors must take MU 204 twice during their four year program. Wind and percussion majors take ~~MU 420~~; string majors take ~~MU 421~~.
- <sup>4</sup> Wind and percussion majors take ~~MU 420~~; string majors take ~~MU 421~~. 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).
- <sup>5</sup> 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).



**College of Liberal Arts**  
**Department of Music, Theatre, and Dance**  
**BM in Music**  
**Music Therapy Concentration**

**Effective Fall 2016**

A minimum grade of C is required in all music courses used to satisfy the requirements of the BM in Music, Music Therapy Concentration.

**FRESHMAN**

		AUCC	CREDITS
<u>CHEM 103</u>	Chemistry in Context (GT-SC2)	3A	3
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>MU 117</u>	Music Theory I		4
<u>MU 118</u>	Music Theory II		4
<u>MU 131</u>	Introduction to Music History and Literature (GT-AH1)	3B	3

<u>MU 150</u> <sup>1</sup>	Piano Class I	-	<b>1</b>
<u>MU 155</u>	Guitar Class I		2
Select one group from the following: <sup>24</sup>			
Group A:			
<u>MU 172A</u>	Freshman Voice Studio: English/Italian		2
<u>MU 172B</u>	Freshman Voice Studio: German, French		2
Group B:			
Applied Music Instruction - Lower-Division (see list below)			2-4
<u>MU 241</u>	Introduction to Music Therapy		3
Ensemble (see list below) <sup>32</sup>			2
<u>PSY 100</u>	General Psychology (GT-SS3)	3C	3
<u>Mathematics</u>		1B	3
<b>Total Credits</b>			<b>30-32</b>
<b>SOPHOMORE</b>			
<u>BZ 110</u>	Principles of Animal Biology (GT-SC2)	3A	3
<u>BZ 111</u>	Animal Biology Laboratory (GT-SC1)	3A	1
<u>MU 153</u>	Piano Skills for Music Therapists		1
<u>MU 217</u>	Music Theory III		4
<u>MU 218</u>	Music Theory IV		4
<u>MU 250</u>	Music Therapy Practice		3
<u>MU 254</u>	Beginning Conducting		2
Applied Music Instruction - Lower-Division (see list below) <sup>24</sup>			2
<u>MU 440</u>	Music Therapy Methods I		3
Ensemble (see list below) <sup>32</sup>			2
<u>OT 215</u>	Medical Terminology		1
<u>PHIL 100</u>	Appreciation of Philosophy (GT-AH3)	3B	3
<u>Advanced Writing</u>		2	3
<u>PSY 100</u>	General Psychology (GT-SS3)	3C	3
<b>Total Credits</b>			<b>32</b>
<b>JUNIOR</b>			
<u>BMS 300</u>	Principles of Human Physiology		4
<u>BMS 345</u>	Functional Neuroanatomy		4
<u>MU 157</u> <sup>43</sup>	Voice Class I		2
<u>MU 335</u>	Music History II	4A,4B	3
<u>MU 342</u>	Psychology of Music		3
<u>MU 443</u>	Music Therapy Methods II		3

<u>MU 444</u>	Music Therapy Methods III		3
Applied Music Instruction - Upper-Division (see list below)			1
<u>MU 486A</u>	Practicum: Music Therapy	<u>4C</u>	<u>24</u>
Ensemble (see list below) <sup>32</sup>			1
<u>PSY 252</u>	Mind, Brain, and Behavior		3
<u>PSY 320</u>	Abnormal Psychology		3
<b>Total Credits</b>			<b><u>3234</u></b>

**SENIOR**

<u>MU 252D</u>	Instrumental Techniques: Percussion		1
<u>MU 343</u>	Research Methods in Music Therapy		3
<u>MU 445</u>	Improvisation Techniques in Music Therapy		2
<u>MU 486A</u>	Practicum: Music Therapy	4C	1
<u>MU 487</u>	Internship		1
Select one from the following:			
<u>PSY 452</u>	Cognitive Psychology		3
<u>PSY 454</u>	Biological Psychology		3
<u>PSY 458</u>	Cognitive Neuroscience		3
<u>STAT 201</u>	General Statistics		3
<u>Global and Cultural Awareness</u>		3E	3
<u>Historical Perspectives</u>		3D	3
<u>Advanced Writing</u>		<u>2</u>	<u>3</u>
Music Electives			<u>35</u>
<b>Total Credits</b>			<b><u>2625</u></b>

**Program Total Credits: 120**

**Applied Music Instruction - Lower-Division**

Code	Title	Credits
<u>MU 272A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 272B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 272C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 272D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 272E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 272G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 272H</u>	Applied Music Instruction: Organ	1-2
<u>MU 272I</u>	Applied Music Instruction: Piano	1-2
<u>MU 272J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 272K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 272L</u>	Applied Music Instruction: Harp	1-2

Code	Title	Credits
<u>MU 272M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 272N</u>	Applied Music Instruction: Viola	1-2
<u>MU 272O</u>	Applied Music Instruction: Violin	1-2
<u>MU 272P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 272Q</u>	Applied Music Instruction: Voice	1-2
<u>MU 272R</u>	Applied Music Instruction: Bassoon	1-2
<u>MU 272S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 272T</u>	Applied Music Instruction: Flute	1-2
<u>MU 272U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 272V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

#### Applied Music Instruction - Upper-Division

Code	Title	Credits
<u>MU 472A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 472B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 472C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 472D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 472E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 472G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 472H</u>	Applied Music Instruction: Organ	1-2
<u>MU 472I</u>	Applied Music Instruction: Piano	1-2
<u>MU 472J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 472K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 472L</u>	Applied Music Instruction: Harp	1-2
<u>MU 472M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 472N</u>	Applied Music Instruction: Viola	1-2
<u>MU 472O</u>	Applied Music Instruction: Violin	1-2
<u>MU 472P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 472Q</u>	Applied Music Instruction: Voice	1-2
<u>MU 472R</u>	Applied Music Instruction: Bassoon	1-2
<u>MU 472S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 472T</u>	Applied Music Instruction: Flute	1-2
<u>MU 472U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 472V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

#### Ensemble Courses

Code	Title	Credits
<u>MU 201</u>	Men's Chorus	1
<u>MU 202</u>	University Chorus	1

Code	Title	Credits
<u>MU 204</u>	Marching Band	1
<u>MU 205</u>	Concert Band	1
<u>MU 206</u>	Colorado State University Concert Orchestra	1
<u>MU 300</u>	Women's Chorus	1
<u>MU 302</u>	University Orchestra	1
<u>MU 304</u>	Symphonic Band	1
<u>MU 305</u>	Colorado State University Concert Choir	1
<u>MU 309</u>	Jazz Ensemble	1
<u>MU 310</u>	Jazz Combo	1
<u>MU 400</u>	Colorado State University Chamber Choir	1
<u>MU 401</u>	Opera Theater	1-2
<u>MU 402</u>	Theater/Chamber Orchestra	1
<u>MU 404</u>	Symphonic Wind Ensemble	1
<u>MU 407</u>	Accompanying	1
<u>MU 408</u>	Chamber Music	1

- <sup>1</sup> Students with previous keyboard experience may test out of MU 150 and use the one credit for an elective. First-year voice students must take MU 172A and MU 172B, then MU 272Q the second year for two semesters; instrumentalists take MU 272A-MU 272P or MU 272R-MU 272V on a major instrument for 2 semesters each of the first two years.
- <sup>2</sup> First-year voice students must take MU 172A and MU 172B, then MU 272Q the second year for two semesters; instrumentalists take MU 272A-MU 272P or MU 272R-MU 272V on a major instrument for 2 semesters each of the first two years. Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience.
- <sup>3</sup> Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience. Instrumental majors only.
- <sup>4</sup> Instrumental majors only.



**College of Liberal Arts**  
**Department of Music, Theatre, and Dance**  
**BM in Music**  
**Performance Concentration, Jazz Studies Option**

**Effective Fall 2016**

A minimum grade of C is required in all music courses used to satisfy the requirements of the BM in Music, Performance Concentration, Jazz Studies Option.

**FRESHMAN**

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>MU 117</u>	Music Theory I		4



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<u>MU 118</u>	Music Theory II		4
<u>MU 131</u>	Introduction to Music History and Literature (GT-AH1)	3B	3
<u>MU 150</u> <sup>1</sup>	Piano Class I	-	<b>I</b>
Applied Music Instruction – Lower-Division (see list below) <sup>2+</sup>			2
Applied Jazz Instruction (select two credits from the following): <sup>2+</sup>			
<u>MU 274A</u>	Applied Jazz Instruction: Piano		2
<u>MU 274B</u>	Applied Jazz Instruction: String Bass		2
<u>MU 274C</u>	Applied Jazz Instruction: Trombone		2
<u>MU 274D</u>	Applied Jazz Instruction: Trumpet		2
<u>MU 274E</u>	Applied Jazz Instruction: Percussion		2
<u>MU 274F</u>	Applied Jazz Instruction: Saxophone		2
<u>MU 274G</u>	Applied Jazz Instruction: Guitar		2
MU *** Ensemble (see list below) <sup>32</sup>			4
<u>Mathematics</u>		1B	3
Electives			34
<b>Total Credits</b>			<b>29</b>

## SOPHOMORE

<u>ETST 250/HIST 250</u>	African American History (GT-HI1)	3D	3
<u>MU 154</u>	Jazz Piano Class		1
<u>MU 217</u>	Music Theory III		4
<u>MU 218</u>	Music Theory IV		4
<u>MU 225</u>	Jazz Theory		2
Applied Music Instruction – Lower-Division (see list below) <sup>2+</sup>			2
Applied Jazz Instruction (select two credits from the following): <sup>2+</sup>			
<u>MU 274A</u>	Applied Jazz Instruction: Piano		2
<u>MU 274B</u>	Applied Jazz Instruction: String Bass		2
<u>MU 274C</u>	Applied Jazz Instruction: Trombone		2
<u>MU 274D</u>	Applied Jazz Instruction: Trumpet		2
<u>MU 274E</u>	Applied Jazz Instruction: Percussion		2
<u>MU 274F</u>	Applied Jazz Instruction: Saxophone		2
<u>MU 274G</u>	Applied Jazz Instruction: Guitar		2
MU *** Ensemble (see list below) <sup>32</sup>			4
<u>PSY 100</u>	General Psychology (GT-SS3)	3C	3
<u>Advanced Writing</u>		2	3
<u>Biological and Physical Sciences</u>		3A	3
<b>Total Credits</b>			<b>31</b>

## JUNIOR

<u>MU 317</u>	Music Theory V		2
<u>MU 320</u>	Jazz Improvisation		1
<u>MU 325</u>	Jazz Composition/Arranging		2
<u>MU 334</u>	Music History I	4A,4B	3
<u>MU 335</u>	Music History II	4A,4B	3
<u>MU 471</u>	Recital	4C	1
<u>MU 474</u>	Applied Jazz Instruction		<b>4</b>
MU *** Ensemble (see list below) <sup>32</sup>			2
MU *** Music Electives			6
<u>Arts and Humanities</u>		3B	3
Elective			3
<b>Total Credits</b>			<b>30</b>
<b>SENIOR</b>			
<u>MU 332</u>	History of Jazz		3
<u>MU 415</u>	Advanced Jazz Techniques		2
<u>MU 425</u>	Jazz Pedagogy		2
<u>MU 471</u>	Recital	4C	1
<u>MU 474</u>	Applied Jazz Instruction		<b>4</b>
MU *** Ensemble (see list below) <sup>32</sup>			2
<u>Biological and Physical Sciences</u>		3A	4
<u>Global and Cultural Awareness</u>		3E	3
Electives <sup>4</sup>			9
<b>Total Credits</b>			<b>30</b>
<b>Program Total Credits:</b>			<b>120</b>

### Applied Music Instruction - Lower-Division

Code	Title	Credits
<u>MU 272A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 272B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 272C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 272D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 272E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 272G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 272H</u>	Applied Music Instruction: Organ	1-2
<u>MU 272I</u>	Applied Music Instruction: Piano	1-2
<u>MU 272J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 272K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 272L</u>	Applied Music Instruction: Harp	1-2

Code	Title	Credits
<u>MU 272M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 272N</u>	Applied Music Instruction: Viola	1-2
<u>MU 272O</u>	Applied Music Instruction: Violin	1-2
<u>MU 272P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 272Q</u>	Applied Music Instruction: Voice	1-2
<u>MU 272R</u>	Applied Music Instruction: Bassoon	1-2
<u>MU 272S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 272T</u>	Applied Music Instruction: Flute	1-2
<u>MU 272U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 272V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

### Ensemble Courses

Code	Title	Credits
<u>MU 201</u>	Men's Chorus	1
<u>MU 202</u>	University Chorus	1
<u>MU 204</u>	Marching Band	1
<u>MU 205</u>	Concert Band	1
<u>MU 206</u>	Colorado State University Concert Orchestra	1
<u>MU 300</u>	Women's Chorus	1
<u>MU 302</u>	University Orchestra	1
<u>MU 304</u>	Symphonic Band	1
<u>MU 305</u>	Colorado State University Concert Choir	1
<u>MU 309</u>	Jazz Ensemble	1
<u>MU 310</u>	Jazz Combo	1
<u>MU 400</u>	Colorado State University Chamber Choir	1
<u>MU 401</u>	Opera Theater	1-2
<u>MU 402</u>	Theater/Chamber Orchestra	1
<u>MU 404</u>	Symphonic Wind Ensemble	1
<u>MU 407</u>	Accompanying	1
<u>MU 408</u>	Chamber Music	1

<sup>1</sup> ~~B.M. Majors with prior keyboard experience may test out of MU 150 and use the credit toward electives. Major instrument, two semesters for freshman and sophomore.~~

<sup>2</sup> ~~Major instrument, two semesters for freshman and sophomore. Students enrolled in MU 272A-MU 272V should be concurrently enrolled in a concert band (MU 205, MU 304, MU 404). Eight of the total ensemble credits should be satisfied through participation in either MU 309 or MU 310.~~

<sup>3</sup> ~~Students enrolled in MU 272A-MU 272V should be concurrently enrolled in a concert band (MU 205, MU 304, MU 404). Eight of the total ensemble credits should be satisfied through participation in either MU 309 or MU 310. Select enough elective credits to bring program total to 120 credits, of which at least 42 must be upper division (300-400 level).~~

- <sup>4</sup> Select enough elective credits to bring program total to 120 credits, of which at least 42 must be upper-division (300- to 400-level).



**College of Liberal Arts**  
**Department of Music, Theatre, and Dance**  
**BM in Music**  
**Performance Concentration, Orchestral Instrument Option**

**Effective Fall 2016**

A minimum grade of C is required in all music courses used to satisfy the requirements of the BM in Music, Performance Concentration, Orchestral Instrument Option.

**FRESHMAN**

		<b>AUCC</b>	<b>CREDITS</b>
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>MU 117</u>	Music Theory I		4
<u>MU 118</u>	Music Theory II		4
<u>MU 131</u>	Introduction to Music History and Literature (GT-AH1)	3B	3
<u>MU 150</u> <sup>1</sup>	<u>Piano Class I</u>	-	<b>1</b>
Applied Music Instruction – Lower-Division (see list below) <sup>2*</sup>			2-4
MU *** Ensemble (see list below) <sup>3,2</sup>			2
<u>Historical Perspectives</u>		3D	3
<u>Mathematics</u>		1B	3
Electives			<u>3-5</u> 4-6
<b>Total Credits</b>			<b>28-32</b>

**SOPHOMORE**

<u>MU 217</u>	Music Theory III		4
<u>MU 218</u>	Music Theory IV		4
Applied Music Instruction – Lower-Division (see list below) <sup>2*</sup>			4
MU *** Ensemble (see list below) <sup>3,2</sup>			2
<u>PSY 100</u>	General Psychology (GT-SS3)	3C	3
<u>Advanced Writing</u>		2	3
Electives			11
<b>Total Credits</b>			<b>31</b>

**JUNIOR**

<u>MU 254</u>	Beginning Conducting		2
<u>MU 317</u>	Music Theory V		2
<u>MU 318</u>	Arranging and Orchestration		2
<u>MU 334</u>	Music History I	4A,4B	3

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<u>MU 335</u>	Music History II	4A,4B	3
<u>MU 417</u>	Counterpoint		3
<u>MU 471</u>	Recital		1
Applied Music Instruction – Upper-Division (see list below) <sup>4,2</sup>			4
MU *** Ensemble (see list below) <sup>3,2</sup>			2
<u>Arts and Humanities</u>		3B	3
Electives			4
<b>Total Credits</b>			<b>29</b>

## SENIOR

<u>MU 471</u>	Recital	4C	1
Applied Music Instruction – Upper-Division (see list below) <sup>1,2</sup>			4
MU *** Ensemble (see list below) <sup>3,2</sup>			2
MU *** Electives			3
<u>Biological and Physical Sciences</u>		3A	7
<u>Global and Cultural Awareness</u>		3E	3
Electives <sup>5</sup>			8-12
<b>Total Credits</b>			<b>28</b>
<b>Program Total Credits:</b>			<b>120</b>

## Applied Music Instruction - Lower-Division

Code	Title	Credits
<u>MU 272A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 272B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 272C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 272D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 272E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 272G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 272H</u>	Applied Music Instruction: Organ	1-2
<u>MU 272I</u>	Applied Music Instruction: Piano	1-2
<u>MU 272J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 272K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 272L</u>	Applied Music Instruction: Harp	1-2
<u>MU 272M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 272N</u>	Applied Music Instruction: Viola	1-2
<u>MU 272O</u>	Applied Music Instruction: Violin	1-2
<u>MU 272P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 272Q</u>	Applied Music Instruction: Voice	1-2
<u>MU 272R</u>	Applied Music Instruction: Bassoon	1-2

Code	Title	Credits
<u>MU 272S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 272T</u>	Applied Music Instruction: Flute	1-2
<u>MU 272U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 272V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

### Applied Music Instruction - Upper-Division

Code	Title	Credits
<u>MU 472A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 472B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 472C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 472D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 472E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 472G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 472H</u>	Applied Music Instruction: Organ	1-2
<u>MU 472I</u>	Applied Music Instruction: Piano	1-2
<u>MU 472J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 472K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 472L</u>	Applied Music Instruction: Harp	1-2
<u>MU 472M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 472N</u>	Applied Music Instruction: Viola	1-2
<u>MU 472O</u>	Applied Music Instruction: Violin	1-2
<u>MU 472P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 472Q</u>	Applied Music Instruction: Voice	1-2
<u>MU 472R</u>	Applied Music Instruction: Bassoon	1-2
<u>MU 472S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 472T</u>	Applied Music Instruction: Flute	1-2
<u>MU 472U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 472V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

### Ensemble Courses

Code	Title	Credits
<u>MU 201</u>	Men's Chorus	1
<u>MU 202</u>	University Chorus	1
<u>MU 204</u>	Marching Band	1
<u>MU 205</u>	Concert Band	1
<u>MU 206</u>	Colorado State University Concert Orchestra	1
<u>MU 300</u>	Women's Chorus	1
<u>MU 302</u>	University Orchestra	1
<u>MU 304</u>	Symphonic Band	1

Code	Title	Credits
<u>MU 305</u>	Colorado State University Concert Choir	1
<u>MU 309</u>	Jazz Ensemble	1
<u>MU 310</u>	Jazz Combo	1
<u>MU 400</u>	Colorado State University Chamber Choir	1
<u>MU 401</u>	Opera Theater	1-2
<u>MU 402</u>	Theater/Chamber Orchestra	1
<u>MU 404</u>	Symphonic Wind Ensemble	1
<u>MU 407</u>	Accompanying	1
<u>MU 408</u>	Chamber Music	1

- 1 ~~Students with previous keyboard experience may test out of MU 150 and use the one credit for an elective. Major instrument. Take two semesters each during the freshman and sophomore years.~~
- 2 ~~Major instrument. Take two semesters each during the freshman and sophomore years. Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience.~~
- 3 ~~Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience. Major instrument. Take two semesters each during the junior and senior years.~~
- 4 ~~Major instrument. Take two semesters each during the junior and senior years. Select enough elective credits to bring the program total to 120, of which at least 42 must be upper-division (300- to 400-level).~~
- 5 ~~Select enough elective credits to bring the program total to 120, of which at least 42 must be upper-division (300- to 400-level).~~



**College of Liberal Arts**  
**Department of Music, Theatre, and Dance**  
**BM in Music**  
**Performance Concentration, String Pedagogy Option**

Effective Fall 2016

A minimum grade of C is required in all music courses used to satisfy the requirements of the BM in Music, Performance Concentration, String Pedagogy Option.

**FRESHMAN**

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>MU 117</u>	Music Theory I		4
<u>MU 118</u>	Music Theory II		4
<u>MU 131</u>	Introduction to Music History and Literature (GT-AH1)	3B	3
<u>MU 150</u> <sup>1</sup>	Piano Class I	-	1

Select two semesters from the following:<sup>2,4</sup>

<u>MU 272M</u>	Applied Music Instruction: String Bass	2
<u>MU 272N</u>	Applied Music Instruction: Viola	2

<u>MU 272O</u>	Applied Music Instruction: Violin	2
<u>MU 272P</u>	Applied Music Instruction: Violoncello	2
MU *** Ensemble (see list below) <sup>32</sup>		2
<u>Historical Perspectives</u>	3D	3
<u>Mathematics</u>	1B	3
Electives		56
<b>Total Credits</b>		<b>30</b>

## SOPHOMORE

<u>MU 217</u>	Music Theory III	4
<u>MU 218</u>	Music Theory IV	4
Select two semesters from the following: <sup>34</sup>		
<u>MU 272M</u>	Applied Music Instruction: String Bass	1-2
<u>MU 272N</u>	Applied Music Instruction: Viola	1-2
<u>MU 272O</u>	Applied Music Instruction: Violin	1-2
<u>MU 272P</u>	Applied Music Instruction: Violoncello	1-2
MU *** Ensemble (see list below) <sup>32</sup>		2
<u>PSY 100</u>	General Psychology (GT-SS3)	3C 3
<u>Advanced Writing</u>	2	3
Elective		10-12
<b>Total Credits</b>		<b>28-32</b>

## JUNIOR

<u>MU 254</u>	Beginning Conducting	2
<u>MU 317</u>	Music Theory V	2
<u>MU 318</u>	Arranging and Orchestration	2
<u>MU 334</u>	Music History I	4A,4B 3
<u>MU 335</u>	Music History II	4A,4B 3
Select two credits from the following:		
<u>MU 351A</u>	String Pedagogy I: Violin/Viola.	2
<u>MU 351B</u>	String Pedagogy I: Violoncello	2
<u>MU 351C</u>	String Pedagogy I: String Bass	2
Select two credits from the following:		
<u>MU 352A</u>	String Pedagogy II: Violin/Viola	2
<u>MU 352B</u>	String Pedagogy II: Violoncello	2
<u>MU 352C</u>	String Pedagogy II: String Bass	2
<u>MU 417</u>	Counterpoint	3
Applied Music Instruction – Upper-Division (see list below) <sup>13</sup>		4
MU *** Ensemble (see list below) <sup>32</sup>		2



Select one from the following:		
<u>PSY 260</u>	Child Psychology	3
<u>PSY 465</u>	Adolescent Psychology	3
<u>Arts and Humanities</u>	3B	3
<b>Total Credits</b>		<b>31</b>

## SENIOR

Select two credits from the following:		
<u>MU 451A</u>	String Pedagogy III: Violin	2
<u>MU 451B</u>	String Pedagogy III: Violoncello	2
<u>MU 451C</u>	String Pedagogy III: String Bass	2
Select two credits from the following:		
<u>MU 464A</u>	String Literature: Violin/Viola	2
<u>MU 464B</u>	String Literature: Violoncello	2
<u>MU 464C</u>	String Literature: String Bass	2
<u>MU 471</u>	Recital	4C 1
Applied Music Instruction – Upper-Division (see list below) <sup>4a</sup>		4
MU *** Ensemble (see list below) <sup>3a</sup>		2
MU *** Music Electives		3
<u>Biological and Physical Sciences</u>	3A	7
<u>Global and Cultural Awareness</u>	3E	3
Electives <sup>5</sup>		2-6
<b>Total Credits</b>		<b>26-30</b>
<b>Program Total Credits:</b>		<b>120</b>

### Applied Music Instruction - Upper-Division

Code	Title	Credits
<u>MU 472A</u>	Applied Music Instruction: Euphonium	1-2
<u>MU 472B</u>	Applied Music Instruction: French Horn	1-2
<u>MU 472C</u>	Applied Music Instruction: Trombone	1-2
<u>MU 472D</u>	Applied Music Instruction: Trumpet	1-2
<u>MU 472E</u>	Applied Music Instruction: Tuba	1-2
<u>MU 472G</u>	Applied Music Instruction: Harpsichord	1-2
<u>MU 472H</u>	Applied Music Instruction: Organ	1-2
<u>MU 472I</u>	Applied Music Instruction: Piano	1-2
<u>MU 472J</u>	Applied Music Instruction: Percussion	1-2
<u>MU 472K</u>	Applied Music Instruction: Guitar	1-2
<u>MU 472L</u>	Applied Music Instruction: Harp	1-2
<u>MU 472M</u>	Applied Music Instruction: String Bass	1-2

Code	Title	Credits
<u>MU 472N</u>	Applied Music Instruction: Viola	1-2
<u>MU 472O</u>	Applied Music Instruction: Violin	1-2
<u>MU 472P</u>	Applied Music Instruction: Violoncello	1-2
<u>MU 472Q</u>	Applied Music Instruction: Voice	1-2
<u>MU 472R</u>	Applied Music Instruction: Bassoon	1-2
<u>MU 472S</u>	Applied Music Instruction: Clarinet	1-2
<u>MU 472T</u>	Applied Music Instruction: Flute	1-2
<u>MU 472U</u>	Applied Music Instruction: Oboe	1-2
<u>MU 472V</u>	Applied Music Instruction: Saxophone (Alto)	1-2

### Ensemble Courses

Code	Title	Credits
<u>MU 201</u>	Men's Chorus	1
<u>MU 202</u>	University Chorus	1
<u>MU 204</u>	Marching Band	1
<u>MU 205</u>	Concert Band	1
<u>MU 206</u>	Colorado State University Concert Orchestra	1
<u>MU 300</u>	Women's Chorus	1
<u>MU 302</u>	University Orchestra	1
<u>MU 304</u>	Symphonic Band	1
<u>MU 305</u>	Colorado State University Concert Choir	1
<u>MU 309</u>	Jazz Ensemble	1
<u>MU 310</u>	Jazz Combo	1
<u>MU 400</u>	Colorado State University Chamber Choir	1
<u>MU 401</u>	Opera Theater	1-2
<u>MU 402</u>	Theater/Chamber Orchestra	1
<u>MU 404</u>	Symphonic Wind Ensemble	1
<u>MU 407</u>	Accompanying	1
<u>MU 408</u>	Chamber Music	1

- Students with previous keyboard experience may test out of MU 150 and use the one credit for an elective. Take two semesters each in the freshman and sophomore years.
- Take two semesters each in the freshman and sophomore years. Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience.
- Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience. Major instrument. Take two semesters each in the junior and senior years.
- Major instrument. Take two semesters each in the junior and senior years. Select enough elective credits to bring the program total to 120, of which at least 42 must be upper division (300- to 400-level).

5. Select enough elective credits to bring the program total to 120, of which at least 42 must be upper-division (300- to 400-level).



**College of Liberal Arts**  
**Department of Music, Theatre, and Dance**  
**BM in Music**  
**Performance Concentration, Voice Option**

**Effective Fall 2016**

A minimum grade of C is required in all music courses used to satisfy the requirements of the BM in Music, Performance Concentration, Voice Option.

**FRESHMAN**

		<b>AUCC</b>	<b>CREDITS</b>
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>MU 117</u>	Music Theory I		4
<u>MU 118</u>	Music Theory II		4
<u>MU 131</u>	Introduction to Music History and Literature (GT-AH1)	3B	3
<u>MU 150</u> <sup>1</sup>	Piano Class I	-	<b>1</b>
<u>MU 172A</u>	Freshman Voice Studio: English/Italian		2
<u>MU 172B</u>	Freshman Voice Studio: German, French		2
MU *** Ensemble <sup>2+</sup>			2
<u>PSY 100</u>	General Psychology (GT-SS3)	3C	3
<u>Biological and Physical Sciences</u>		3A	4
<u>Mathematics</u>		1B	3
<b>Total Credits</b>			<b>3130</b>

**SOPHOMORE**

LITA *** Foreign Language (Italian)			5
<u>MU 217</u>	Music Theory III		4
<u>MU 218</u>	Music Theory IV		4
<u>MU 272Q</u> <sup>32</sup>	Applied Music Instruction: Voice		<b>4</b>
<u>MU 365A</u>	Advanced Diction: Italian and English		1
<u>MU 365B</u>	Advanced Diction: French and German		1
MU *** Ensemble <sup>2+</sup>			2
<u>TH 352</u>	Acting for Singers		2
<u>Advanced Writing</u>		2	3
<u>Arts and Humanities</u>		3B	3
<b>Total Credits</b>			<b>29</b>

**JUNIOR**

LFRE *** Foreign Language (French)		5
LGER *** Foreign Language (German)		5
<u>MU 254</u>	Beginning Conducting	2
<u>MU 317</u>	Music Theory V	2
<u>MU 334</u>	Music History I	4A,4B 3
<u>MU 335</u>	Music History II	4A,4B 3
<u>MU 417</u>	Counterpoint	3
<u>MU 471</u>	Recital	1
<u>MU 472Q</u> <sup>12</sup>	Applied Music Instruction: Voice	<b>4</b>
MU *** Ensemble <sup>24</sup>		2
<b>Total Credits</b>		<b>30</b>

**SENIOR**

<u>MU 338</u>	Opera History and Literature	2
<u>MU 466</u>	Song Literature	2
<u>MU 467</u>	Vocal Pedagogy	2
<u>MU 471</u>	Recital	4C 1
<u>MU 472Q</u> <sup>12</sup>	Applied Music Instruction: Voice	<b>4</b>
MU *** Ensemble <sup>24</sup>		2
Music Electives		3
<u>Biological and Physical Sciences</u>		3A 3
<u>Global and Cultural Awareness</u>		3E 3
<u>Historical Perspectives</u>		3D 3
Electives <sup>13</sup>		56
<b>Total Credits</b>		<b>3034</b>

**Program Total Credits: 120**

**Ensemble Courses**

Code	Title	Credits
<u>MU 201</u>	Men's Chorus	1
<u>MU 202</u>	University Chorus	1
<u>MU 204</u>	Marching Band	1
<u>MU 205</u>	Concert Band	1
<u>MU 206</u>	Colorado State University Concert Orchestra	1
<u>MU 300</u>	Women's Chorus	1
<u>MU 302</u>	University Orchestra	1
<u>MU 304</u>	Symphonic Band	1
<u>MU 305</u>	Colorado State University Concert Choir	1
<u>MU 309</u>	Jazz Ensemble	1

Code	Title	Credits
<u>MU 310</u>	Jazz Combo	1
<u>MU 400</u>	Colorado State University Chamber Choir	1
<u>MU 401</u>	Opera Theater	1-2
<u>MU 402</u>	Theater/Chamber Orchestra	1
<u>MU 404</u>	Symphonic Wind Ensemble	1
<u>MU 407</u>	Accompanying	1
<u>MU 408</u>	Chamber Music	1

- 1 ~~Students with previous keyboard experience may test out of MU 150 and use the one credit for an elective. Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience.~~
- 2 ~~Students must participate in an ensemble during each semester in which they are enrolled in MU 172A-MU 172B, MU 272A-MU 272V, and MU 472A-MU 472V. At least once during the program of study, this must be achieved by taking MU 408 or through another small ensemble experience. Take two semesters each during the sophomore, junior, and senior years.~~
- 3 ~~Take two semesters each during the sophomore, junior, and senior years. 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).~~
- 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- to 400-level).~~



**College of Natural Sciences**  
**Department of Computer Science**  
**Major in Computer Science**

**Effective Fall 2016**

**FRESHMAN**

		AUCC	CREDITS
<u>CO 150</u>	College Composition (GT-CO2)	1A	3
<u>CS 160</u>	Foundations in Programming	-	4
<u>CS 161</u>	Object-Oriented Problem Solving	-	4
<u>CS 192</u>	First-Year Seminar-Computer Science		2
<u>CS163 or CS164</u> (replaces CS160)	Java (CS1) No Prior Programming Java (CS1) Prior Programming		4
<u>CS165</u> (Replaces CS161)	Java (CS2) Data Structures and Algorithms		4
<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
Select at least two courses from two departments totaling a minimum of 7 credits from the following (one course must be or include the sequenced laboratory):			7
<u>BZ 110</u> & <u>BZ 111</u>	Principles of Animal Biology (GT-SC2)	3A	
<u>BZ 120</u>	Principles of Plant Biology (GT-SC1)	3A	
<u>CHEM 107</u>	Fundamentals of Chemistry (GT-SC2)	3A	

**& CHEM 108**

**CHEM 111  
& CHEM 112**

General Chemistry I (GT-SC2)

3A

**GEOL 120  
& GEOL 121**

Exploring Earth: Physical Geology (GT-SC2)

3A

**LIFE 102**

Attributes of Living Systems (GT-SC1)

3A

**PH 141**

Physics for Scientists and Engineers I (GT-SC1)

3A

Electives

3

**Total Credits**

**31**

**SOPHOMORE**

**CS 200**

Algorithms and Data Structures

-

4

**CS220** (Replaces CS200)

Discrete Structures and their Applications

4

**CS 253**

Software Development with C++

4

**CS 270**

Computer Organization

4

**MATH 229 or 369**

Matrices and Linear Equations  
Linear Algebra I

2-3

**STAT 301 or 315**

Introduction to Statistical Methods  
Statistics for Engineers and Scientists

3

**Arts and Humanities**

3B

3

**Historical Perspectives**

3D

3

**Social and Behavioral Sciences**

3C

3

Electives

2-3

**Total Credits**

**29**

**JUNIOR**

**CS 314**

Software Engineering

3

**CS 320**

Algorithms--Theory and Practice

3

**CS 356**

Systems Security

3

**CS 370**

Operating Systems

3

Select a minimum of 5 credits additional science from the list of 3A courses in the freshman year and/or from the following for a total of at least 12 credits:

5

**AA 301**

Astrophysics I

**ATS 350**

Introduction to Weather and Climate

**ATS 351**

Introduction to Weather and Climate Laboratory

**BZ 220**

Introduction to Evolution

**CHEM 113  
& CHEM 114**

General Chemistry II

**CIVE 260**

Engineering Mechanics-Statics

**GEOL 154**

Historical and Analytical Geology

<u>LIFE 201A</u>	Introductory Genetics: Applied/Population/Conservation/Ecological (GT-SC2)	3A
<u>LIFE 201B</u>	Introductory Genetics: Molecular/Immunological/Developmental (GT-SC2)	3A
<u>PH 142</u>	Physics for Scientists and Engineers II (GT-SC1)	3A
<u>PSY 352</u>	Learning and Memory	
<u>SOCR 330</u>	Principles of Genetics	
<u>SOCR 331</u>	Genetics Laboratory	

<u>Advanced Writing</u>	2	3
<u>Arts and Humanities</u>	3B	3
<u>Global and Cultural Awareness</u>	3E	3
Electives		3
<b>Total Credits</b>		<b>29</b>

## SENIOR

### Group I-A:

Select one course from the following:			4
<u>CS 410</u>	Introduction to Computer Graphics	4A,4C	
<u>CS 414</u>	Object-Oriented Design	4A,4C	
<u>CS 435</u>	Introduction to Big Data	4A,4C	
<u>CS 440</u>	Introduction to Artificial Intelligence	4A,4C	
<u>CS 454</u>	Principles of Programming Languages	4A,4C	
<u>CS 455</u>	Introduction to Distributed Systems	4A,4C	
<u>CS 464</u>	Principles of Human-Computer Interaction	4A,4C	
<u>CS 475</u>	Parallel Programming	4A,4C	

### Group II:

Select at least 9 hours from the following <b>Technical Electives:</b> <sup>1</sup>	4B	6-9
<u>CIS 350</u>	Operating Systems and Networks	4B
<u>CIS 355</u>	Business Database Systems	4B
<u>CIS 360</u>	Systems Analysis and Design	4B
<u>CIS 410</u>	Web Application Development	4B
<u>CIS 413</u>	Advanced Networking and Security	4B
<u>E 320</u>	Introduction to the Study of Language	4B
<u>ECE 311</u>	Linear System Analysis I	4B
<u>ECE 312</u>	Linear System Analysis II	4B
<u>ECE 331</u>	Electronics Principles I	4B
<u>ECE 332</u>	Electronics Principles II	4B
<u>ECE 411</u>	Control Systems	4B

<u>ECE 421</u>	Telecommunications I	4B
<u>ECE 422</u>	Telecommunications II	4B
<u>ECE 451</u>	Digital System Design	4B
<u>JTC 413</u>	New Communication Technologies and Society	4B
<u>MATH 301</u>	Introduction to Combinatorial Theory	4B
<u>MATH 317</u>	Advanced Calculus of One Variable	4B
<u>MATH 331</u>	Introduction to Mathematical Modeling	4B
<u>MATH 332</u>	Partial Differential Equations	4B
<u>MATH 340</u>	Introduction to Ordinary Differential Equations	4B
<u>MATH 345</u>	Differential Equations	4B
<u>MATH 360</u>	Mathematics of Information Security	4B
<u>MATH 366</u>	Introduction to Abstract Algebra	4B
<u>MATH 369</u>	Linear Algebra I	4B
<u>MATH 405</u>	Introduction to Number Theory	4B
<u>MATH 417</u>	Advanced Calculus I	4B
<u>MATH 418</u>	Advanced Calculus II	4B
<u>MATH 430</u>	Fourier and Wavelet Analysis with Apps	4B
<u>MATH 435</u>	Projects in Applied Mathematics	4B
<u>MATH 450</u>	Introduction to Numerical Analysis I	4B
<u>MATH 451</u>	Introduction to Numerical Analysis II	4B
<u>MATH 460</u>	Information and Coding Theory	4B
<u>MATH 466</u>	Abstract Algebra I	4B
<u>MATH 467</u>	Abstract Algebra II	4B
<u>MATH 469</u>	Linear Algebra II	4B
<u>MATH 470</u>	Euclidean and Non-Euclidean Geometry	4B
<u>MATH 472</u>	Introduction to Topology	4B
<u>MATH 474</u>	Introduction to Differential Geometry	4B
<u>MECH 307</u>	Mechatronics and Measurement Systems	4B
<u>NR 322</u>	Introduction to Geographic Information Systems	4B
<u>NR 323</u>	Remote Sensing and Image Interpretation	4B
<u>NR 422</u>	GIS Applications in Natural Resource Management	4B
<u>NR 423</u>	Applications of Global Positioning Systems	4B
<u>PH 314</u>	Introduction to Modern Physics	4B
<u>PH 315</u>	Modern Physics Laboratory	4B
<u>PH 341</u>	Mechanics	4B
<u>PH 351</u>	Electricity and Magnetism	4B
<u>PH 353</u>	Optics and Waves	4B



<u>PH 361</u>	Physical Thermodynamics	4B
<u>PH 451</u>	Introductory Quantum Mechanics I	4B
<u>PHIL 305F</u>	Philosophical Issues in the Professions: Information Science	4B
<u>PHIL 410</u>	Formal Logic	4B
<u>PHIL 415</u>	Logic and Scientific Method	4B
<u>PSY 354</u>	Human-Computer Interaction	4B
<u>PSY 452</u>	Cognitive Psychology	4B
<u>PSY 456</u>	Sensation and Perception	4B
<u>STAT 305</u>	Sampling Techniques	4B
<u>STAT 340</u>	Multiple Regression Analysis	4B
<u>STAT 341</u>	Statistical Data Analysis I	4B
<u>STAT 342</u>	Statistical Data Analysis II	4B
<u>STAT 350</u>	Design of Experiments	4B
<u>STAT 372</u>	Data Analysis Tools	4B
<u>STAT 400</u>	Statistical Computing	4B
<u>STAT 420</u>	Probability and Mathematical Statistics I	4B
<u>STAT 421</u>	Introduction to Stochastic Processes	4B
<u>STAT 430</u>	Probability and Mathematical Statistics II	4B
<u>STAT 440</u>	Bayesian Data Analysis	4B
<u>STAT 460</u>	Applied Multivariate Analysis	4B

Group 1-B:

Select three courses (not previously taken) from Group 1-A above and/or from the following for a minimum of 12 credits:		12
<u>CS 420</u>	Introduction to Analysis of Algorithms	4C
<u>CS 425</u>	Introduction to Bioinformatics Algorithms	4C
<u>CS 430</u>	Database Systems	4C
<u>CS 453</u>	Introduction to Compiler Construction	4C
<u>CS 457</u>	Computer Networks and the Internet	4C
<u>CS 470</u>	Computer Architecture	4C

Electives<sup>2</sup> 6-9

**Total Credits 31**

**Program Total Credits: 120**

<sup>1</sup> Select three courses from the CS Department Group II list for a total of 6-9 credits (6 credits if MATH 369 is taken to meet the linear algebra requirement in the Sophomore year).

<sup>2</sup> 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).



**Intra-University  
Interdisciplinary Minor in International Development**

**Effective Fall 2016**

**Core Courses**

Select 6 credits from the following:	6
<u>ANTH 200</u>	Cultures and the Global System (GT-SS3)
<u>ECON 460</u>	Economic Development
<u>GR 100</u>	Introduction to Geography (GT-SS2)
<u>IE 270/AGRI 270</u>	World Interdependence-Population and Food (GT-SS3)
<u>IE 470</u>	Women and Development
<u>IE 471</u>	Children and Youth in Global Context
<u>POLS 232</u>	International Relations (GT-SS1)
<u>POLS 462</u>	Globalization, Sustainability, and Justice
<u>IE 479/ANTH 479</u>	International Development Theory and Practice
	3

**Supporting Courses Group A <sup>1</sup>**

Select at least 9 credits from the following courses or from additional upper-division courses approved by the International Development Board and advisor	9
<u>ANTH 310</u>	Peoples and Cultures of Africa
<u>ANTH 312</u>	Modern Indian Culture and Society
<u>ANTH 314</u>	Southeast Asian Cultures and Societies
<u>ANTH 319/ETST 319</u>	Latin American Peasantries
<u>ANTH 329</u>	Cultural Change
<u>ANTH 340</u>	Medical Anthropology
<u>ANTH 413</u>	Indigenous Peoples Today
<u>ANTH 414/ETST 414</u>	Development in Indian Country
<u>ANTH 415</u>	Indigenous Ecologies and the Modern World
<u>ANTH 441</u>	Method in Cultural Anthropology
<u>ANTH 449</u>	Participatory Monitoring and Evaluation
<u>AREC 415</u>	International Agricultural Trade
<u>AREC 460</u>	Ag- and Resource-Based Economic Development
<u>ECON 332/POLS 332</u>	International Political Economy
<u>ECON 370</u>	Comparative Economic Systems
<u>ECON 440</u>	International Economics I
<u>ECON 442</u>	International Economics II
<u>FIN 475</u>	International Business Finance
<u>GR 320</u>	Cultural Geography
<u>IE 472</u>	Education for Global Peace
<u>INST 300</u>	Approaches to International Studies

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<u>JTC 412</u>	International Mass Communication
L*** Foreign languages <sup>2</sup>	
<u>LFRE 433A</u> or <u>LFRE 433B</u>	Advanced French/Francophone Culture: Representations <sup>3</sup> Advanced French/Francophone Culture: Center and Margins
<u>MGT 475</u>	International Business Management
<u>MKT 365</u>	International Marketing
<u>NRRT 320</u>	International Issues-Recreation and Tourism
<u>PHIL 320</u>	Ethics of Sustainability
<u>PHIL 345</u>	Environmental Ethics
<u>POLS 331</u>	Politics and Society Along Mexican Border
<u>POLS 362</u>	Global Environmental Politics
<u>POLS 431</u>	International Law
<u>POLS 433</u>	International Organization
<u>POLS 442</u>	Environmental Politics in Developing World
<u>POLS 443</u>	Comparative Social Movements
<u>POLS 444</u>	Comparative African Politics
<u>POLS 445</u>	Comparative Asian Politics
<u>POLS 446</u>	Politics of South America
<u>POLS 447</u>	Politics in Mexico, Central America, Caribbean
<u>POLS 449</u>	Middle East Politics
<u>PSY 327</u>	Psychology of Women
<u>SOC 320</u>	Population-Natural Resources and Environment
<u>SOC 341</u>	Sociology of Rural Life
<u>SOC 364</u>	Agriculture and Global Society
<u>SOC 366</u>	Peoples and Institutions of Latin America
<u>SOC 429</u>	Comparative Urban Studies
<u>SOC 460</u>	Society and Environment
<u>SOC 461</u>	Water, Society, and Environment
<u>SOC 474</u>	Social Movements and Collective Behavior
<u>SOCR 475</u>	Global Challenges in Plant and Soil Science
<u>SOWK 450/IE 450</u>	International Social Welfare and Development
<u>SPCM 434</u>	Intercultural Communication
Internship	

**Supporting Courses Group B <sup>1</sup>**

Select at least 3 credits from the following courses, OR from Core Courses or Supporting Courses Group A not previously taken, OR from additional courses approved by the International Development Board and advisor:

3

IE 116/AGRI 116 Plants and Civilizations (GT-SS3)

L\*\*\* Foreign Languages <sup>4</sup>

POLS 131

Current World Problems (GT-SS1)

POLS 241

Comparative Government and Politics (GT-SS1)

**Additional Requirements**

International Development Events <sup>5</sup> 0

**Program Total Credits 21**

- <sup>1</sup> No more than 6 credits may be taken in any subject code from among all the supporting courses, both Group A and Group B.
- <sup>2</sup> Select from upper-division (300- to 400-level) language courses.
- <sup>3</sup> Accepted only when designated "Des Questions de developement a travers le cinema africain."
- <sup>4</sup> Select from any level language courses. A maximum of 6 credits are allowed for foreign language courses.
- <sup>5</sup> Students are required to participate in two on-campus events focused on international development, as approved by advisor.



The meeting adjourned at 3:55 p.m.

(FC) 2/12/2016

Carole Makela, Chair  
Shelly Ellerby, Curriculum Liaison Specialist

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MEMORANDUM

DATE: January 14, 2016  
TO: Mary Stromberger, Chair Faculty Council  
FROM: Rick Miranda, Provost and Executive Vice President  
SUBJECT: Approval of Spring and Summer Degree Candidates – May 2016 Commencement

Rick Miranda, Provost and Executive Vice President, MOVES THAT FACULTY COUNCIL APPROVE THE CANDIDATES WHO MEET THE DEGREE REQUIREMENTS FOR GRADUATION AT THE CLOSE OF THE 2016 SPRING AND SUMMER SEMESTERS.

## Brief Bio

Dr. Mary E. Stromberger  
Department of Soil and Crop Sciences  
Nominee for Chair of Faculty Council

Dr. Mary Stromberger is a Professor of Soil Microbiology in the Department of Soil and Crop Sciences, College of Agricultural Sciences, and the current Chair of Faculty Council. She has been active in Faculty Council and its standing committees since 2007, when she joined the Committee on Scholarship, Research and Graduate Education (CoSRGE) and soon afterwards the Committee on Libraries. She served as Chair of CoSRGE from 2011-2012, as her department's representative to Faculty Council in 2011-2012, as Vice Chair of Faculty Council from 2012-2014, and Chair since 2014.

During her time as Chair, Mary has worked to increase communication within Faculty Council and its standing committees, and build collaborative relationships with faculty, other employee councils, and administrators. Mary regularly engages with the Administrative Professional Council and the Classified Personnel Council to promote shared governance for all employees, and build solidarity when issues important to all employees arise. Mary actively works to promote shared governance by advocating for faculty involvement at the earliest stages of initiatives and budgetary decisions. As Chair, Mary has leadership roles in several campus initiatives, including Re-Envision CSU, affordable housing solutions, parking and transportation planning development, and recruitment and retention of diverse faculty. If re-elected, Mary will continue to advocate for shared governance and its process, and will collaborate with campus stakeholders on new initiatives related to diversity, teaching and service recognition and evaluation, career pathways for non-tenure track faculty, and long-term strategic planning.

As a Professor, Mary teaches undergraduate and graduate courses in soil ecology and microbiology. She is nationally and internationally recognized for her research in soil health and soil ecosystem services, particularly in the area of plant-microbial interactions for improved drought tolerance in winter wheat. Mary is a recipient of a Fulbright Scholar Award, the Charles N. Shepardson Faculty Teaching Award, and the Gamma Sigma Delta Faculty Award. She is active in her professional societies (Soil Science Society of America and Agronomy Society of America), and has served as the Associate Editor for the Soil Science Society of America Journal (2009-2014) and as chair of the Soil Biology and Biochemistry Division of SSSA in 2014. She has authored 40+ peer-reviewed journal articles, four technical reports, and one book chapter, and is a co-recipient of the Soil Biology and Biochemistry journal's John S. Waid Review award for most influential paper of 2013.

## Brief Bio

**Stephanie Clemons, Ph.D., FASID, FIDEC**  
 Department of Design and Merchandising  
 College of Health and Human Sciences

Nominee for Vice Chair, Faculty Council

Dr. Stephanie Clemons is a full professor in the Department of Design and Merchandising, College of Health and Human Sciences. Stephanie has been at Colorado State University since 1988 and most recently was recognized as a University Distinguished Teaching Scholar (2014) and recipient of the Board of Governor's Excellence in Undergraduate Teaching Award (2015). She was selected as a Fulbright Senior Program Specialist, Urban Design for the United States (2010-15).

Stephanie became involved with Faculty Council in 2003 when she served for one year on the Committee on Teaching and Learning (CoTL). From 2005 to 2009 Stephanie served on the Committee on Scholastic Standards and again on CoTL from 2010-2012. She served as the CoTL Chair from 2012-15. Two of the more visible campus-wide initiatives Stephanie has collaborated on are the "flipped classroom" pilot program and the "I Care" buttons.

As Vice-Chair of Faculty Council, Stephanie serves as a member of the Executive Committee and other committees as identified by Chair, Faculty Council. She is currently a member of the Provost Adhoc Committee for Student Success (2012-current) and attends ACUA. She is also a member on the newly developed CSU Online Advisory Committee.

In the past, Stephanie has served on many other university-wide committees including GAPS Subcommittee for Student Success (2014-15), University Graduate School Education Advisory Committee (2013, spring), International Programs Operations Committee (2013, spring), Campus Climate Sub-committee (2006), and University Faculty Honors council (2002-2004). In addition, at the college level, she has served on many committees including the CHHS Curriculum Committee (2001-2007; 2012-2013).

Within her discipline, Stephanie has been a recognized leader in several capacities including Chair, *Journal of Interior Design* (2008-2011), President of the Interior Design Educators Council (IDEC), and currently as Past Chair, Board of Directors, American Society of Interior Designers (26,000 members). She has been recognized as a Fellow by both IDEC and ASID. Several years ago, she was selected by CSU to participate in the HERS Institute - an intensive 12-day curriculum that prepares women faculty and administrators for institutional leadership roles. The Institutes focus is on knowledge, skills and perspectives for achieving institutional priorities and maximizing institutional resources.

Stephanie has received numerous awards for research, teaching and service including 2001 *Colorado State University Alumni Association Best Teacher Award*, University Alumni Association, *Outstanding Teaching Award*, College of Applied Human Sciences and *Jack E. Cermak Outstanding Advisor Award*, College of Applied Human Sciences. She was instrumental in procuring the recognition for the Department of Design and Merchandising as the First University Partner of Autodesk, Inc. She is author or co-author on 33 peer-reviewed journal articles, seven refereed/invited book chapter publications, 69 refereed papers (national/international), two white papers, and one comprehensive design textbook. She has been PI or CO-PI on several small research and teaching grants.

## Brief Bio

Dr. Paul F. Doherty, Jr.

Candidate for Faculty Council Board of Governors Faculty Representative

Paul Doherty is a Full Professor in the Department of Fish, Wildlife, and Conservation Biology at Colorado State University (CSU). He has been a faculty member since 2003 and was his departmental representative to Faculty Council FA2010-SP2014 and the College of Natural Resources representative to the Faculty Council Executive Committee FA2011-SP2014. Paul served as Vice Chair of Faculty Council FA2014-SP2015 and is currently the Board of Governors Faculty Representative. Paul also currently serves on the Standing Committee on the Status of Women Faculty, President's Sustainability Committee, Advisory Committee on Undergraduate Affairs, and the Education Abroad Advisory Committee. Paul looks forward to continuing the duties of the Board of Governors Faculty Representative for a final year, and to further supporting the Chair and Faculty Council in general.

Paul received his BS in Entomology from the University of Delaware and his MS and PhD from The Ohio State University. He worked as a postdoctoral research scientist at the Université Pierre & Marie Curie /École Normal Supérieure in Paris, France as well as for the USGS Patuxent Wildlife Research Center in Laurel, MD and the US Fish and Wildlife Service in southern California prior to coming to CSU. His research is at the interface of quantitative methods and empirical wildlife biology. He has authored or co-authored > 85 peer-reviewed papers and book chapters and has an active research program.

Paul has taught 100- through 600-level classes, such as Wildlife Field Studies, Travel Abroad: Wildlife Conservation, Wildlife Data Collection and Analysis, Sampling Designs for Wildlife and Fish Studies, and Vertebrate Population Analysis. He is currently the Academic Director of the NR 220 interdisciplinary Mountain Campus summer course. He has worked closely with The Institute for Learning and Teaching on improving his courses. He teaches 2-3 workshops or short-courses around the world each year. He also advises the CSU Student Chapter of Ducks Unlimited.

Paul has served on national and international advisory committees (e.g., Federal Advisory Committee to the US Bird Banding Laboratory, Research Grade Review Panels, EURING Technical Meeting committees). Paul is currently the editor for *Condor: Ornithological Applications* and is a member of The Wildlife Society, The American Ornithologists' Union (elected Fellow), The Ecological Society of America, Society of Field Ornithologists, The Waterbird Society, The Cooper Society for Ornithology, and The Wilson Ornithological Society.



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MEMORANDUM

DATE: December 11, 2015

TO: Mary Stromberger, Chair  
Executive Committee/Faculty Council

FROM: Jennifer Aberle, Chair  
Committee on Non-Tenure-Track Faculty

SUBJECT: Proposed revision to Section E.2.1.5 Temporary Appointments of the *Manual*

The Committee on Non-Tenure-Track Faculty

MOVES THAT Section E.2.1.5 Temporary Appointments OF THE *ACADEMIC FACULTY AND ADMINISTRATIVE PROFESSIONAL MANUAL* BE REVISED AS FOLLOWS:

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

**E.2.1.5 Temporary Faculty Appointments** (*last revised May 8, 2015*)

Temporary faculty appointments may be either full-time or part-time and are distinguished from other types of appointments by the expectation that the appointment is for a specified period of time, at the end of which, it is anticipated that employment at the University may not be renewed or that the member will transition to a different appointment type (see d. below). Part-time is defined as any fraction less than one hundred (100) percent of full-time. Conditions applicable to temporary appointments are:

a. Temporary appointments are “at will” and are subject to termination by either party at any time (the process set forth in Section D.5.6 regarding the termination of “at will” appointments shall apply to temporary faculty appointments). Temporary appointments need not carry specified ending dates, but an ending date indicating the point in the future when the funding and/or appointment is expected to terminate should be included when known. The inclusion of a specified ending date on an appointment form or other such documentation is for administrative convenience only and does not create a minimum or fixed duration of appointment.

b. Temporary appointees are not eligible for tenure.

c. Temporary appointees are required to enroll in the retirement program and if half-time or greater are eligible to participate in other benefits offered by the University as described in the *Academic Faculty and Administrative Professional Benefits and Privileges Handbook*. Published annually by Human Resources and in Sections F and G of the *Manual*. Eligibility for sick leave is defined in Section F.3.2. Temporary appointees are eligible for faculty privileges described in

Sections G.1 – G.3. Temporary appointees are not eligible for sabbatical leave (see Section F.3.4.1).

d. The University recognizes that the nature of a temporary appointment is incompatible with recurring consecutive appointments over a long period of time with an assignment of 50% or more. Therefore, after the second consecutive semester for a 9-month assignment at 50% or more time (excluding summer session) or after the first year for a 12-month assignment at 50% or more time, the faculty member's appointment shall be required to convert to a special appointment and cannot be renewed as a temporary appointment.

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*Rationale:*

*Section E.2.1.5.d is being proposed to clarify that temporary faculty on assignment for less than 50% time shall maintain a temporary appointment. This defines the nature of temporary faculty at the University and differentiates from those faculty who are hired on consistent basis with expectations of the assignment being at 50% or more time. As well, this change aligns with the Human Resource practices of denoting changes at 50% FTE such as automatically increasing the fringe rate of a faculty member who has been working at the University at 50% or more after one year of employment.*

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MEMORANDUM

Date: December 20, 2015

To: Mary Stromberger, Chair of Faculty Council

From: Eric Prince, Chair of the Committee on University Programs

Re: Biennial Reviews for Discontinuance and Continuance of Centers, Institutes, and Other Special Units (CIOSUs) for the academic year 2015 (Reporting Period FY14 and FY15)  
Committee on University Programs

**The Committee on University Programs reviewed 51 Centers, Institutes, and Other Special Units (CIOSUs) as part of the biennial review oversight process for CIOSUs for the academic year 2015. The CUP recommendations to Faculty Council are to approve as follows:**

**New CIOSUs**

The Committee on University Programs approved an application for a new CIOSU:

TILT- C-ALT The Center for the Analytics of Learning and Teaching  
( Director, Dr. James Folkestad, School of Education )

**CIOSUs Consolidated, Discontinued or Denied Approval**

The following CIOSUs are reported discontinued or consolidated:

CAS- SGC Center for Shortgrass Steppe Long Term Ecological Research  
CHHS-CHN Consortium for Human Nutrition  
CLA-CBRM Center for Biomedical Research in Music  
CLA-REI Regional Economic Institute  
CVMBS-CCIPM Center for Comparative and Integrative Pain Medicine

CHHS-NCVECS National Center for Vehicle Emissions Control and Safety  
(Merged with CHHS-IBE Institute for the Built Environment)

**Continuing CIOSUs:**

The 45 Centers, Institutes, and Other Special Units listed as follows, were reviewed by the Committee on University Programs and are recommended for continuance by the Committee on University Programs:

	<b>CAS</b> <b>Agricultural Sciences - Research Associate Dean: Jan Leach</b>			
1	CAS_CMSQ		Continuation	Center for Meat Safety & Quality
2	CAS_WCIRM		Continuation	Western Center for Integrated Resource Management
	<b>COB</b> <b>College of Business- Research Associate Dean: Dan Ganster</b>			
3	COB_BBI		Continuation	Beverage Business Institute
4	COB_CASE		Continuation	Center for Advancement of Sustainable Enterprise (CASE)
5	COB_CPDBR		Continuation	Center for Professional Development and Business Research
6	COB_EREC		Continuation	Everitt Real Estate Center (EREC)
	<b>COE</b> <b>College of Engineering- Research Associate Dean: Sonia Kreidenweis</b>			
7	COE_CCC		Continuation	Colorado Climate Center
8	COE_CMMS		Continuation	Composite Materials Manufacture & Structures
9	COE_CHILL		Continuation	CSU Chill National Weather Radar Facility
10	COE_CIRA		Continuation	Cooperative Institute for Research in the Atmosphere
11	COE_EECL		Continuation	Engines and Energy Conversion Laboratory
12	COE_EUV		Continuation	EUV
13	COE_GEO		Continuation	Graduate Geo Environmental Room/Geo Technical Lab
14	COE_HHS_UWC		Continuation	Harold H. Short Civil Infrastructure Systems Laboratory
15	COE_HRL		Continuation	Hydraulic Research Lab
16	COE_ISWR		Continuation	International School of Water Resources
17	COE-REC		Continuation	Rural Energy Center
	<b>CHHS</b> <b>Health and Human Sciences - Research Associate Dean: Patti Davies</b>			
18	CHHS_AMOM		Continuation	Avenir Museum of Design and Merchandising
19	CHHS_CFCT		Continuation	Center for Family and Couple Therapy
20	CHHS_CEP		Continuation	Center for Educator Preparation
21	CHHS_CFSPFD		Continuation	Center for Food Safety and the Prevention of Foodborne Disease at CSU
22	CHHS_Aging		Continuation	Center on Aging
23	CHHS_CHN		Continuation	Consortium for Human Nutrition
24	CHHS_HABIC		Continuation	Human Animal Bond in Colorado
25	CHHS_HPCRL		Continuation	Human Performance Clinical Research Lab.
26	CHHS_IBE		Continuation	Institute for the Built Environment
27	CHHS_SPI		Continuation	Scenario Planning Institute
	<b>CLA</b> <b>Liberal Arts - Research Associate Dean: Stephan Weiler</b>			
28	CLA_CDRA		Continuation	Center for Disaster and Risk Analysis
29	CLA_PLHC		Continuation	Public Lands History Center
	<b>CNS</b> <b>Natural Sciences - Research Associate Dean: Jim Sites</b>			
30	CNS_CMB		Continuation	Cell and Molecular Biology Graduate Program
31	CNS_MSN		Continuation	Materials Chemistry Program of Study
	<b>CVMBS</b> <b>CVMBS – Research Associate Dean: Sue VandeWoude</b>			
32	CVMBS_Argus		Continuation	Argus Institute

33	CVMBB_CSUCCVR		Continuation	Colorado State University Center for Cardiovascular Research
34	CVMBB_CCAS		Continuation	Center for Companion Animal Studies
35	CVMBB_EC		Continuation	CSU Equine Center
36	CVMBB_FACC		Continuation	Flint Animal Cancer Center
37	CVMBB_HICAHS		Continuation	High Plains Intermountain Center for Agricultural Health and Safety
38	CVMBB_MRL		Continuation	Mycobacterium Research Laboratories
<b>WCNR</b> <b>Warner College of Natural Resources - Research Associate Dean: Mark Paschke</b>				
39	WCNR_CCC		Continuation	Center for Collaborative Conservation
40	WCNR-Westfire		Continuation	Western Forest Fire Research Center
<b>PROVOST</b> <b>Office of the Provost – RAD Rep: Tammi Vacha-Haase</b>				
41	Provost_CASA		Continuation	Center for Advising and Student Achievement
42	Provost_CSAL		Continuation	Center for the Study of Academic Labor
43	Provost_CNEE		Continuation	Center for New Energy Economy
44	Provost_STEM		Continuation	CSU STEM Center
45	Provost_SSS		Continuation	Society of Senior Scholars
<b>TILT</b> <b>The Institute for Learning and Teaching: Mark Brown</b>				
46	TILT_CM		Continuation	CSU Center for Mindfulness

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☐ Existing CIOSU  
☒ New CIOSU

## Application/Registration

### Colorado State University Centers, Institutes and Other Special Units

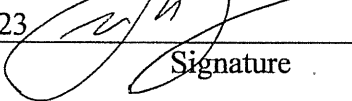
Name of individual completing this application: James E. Folkestad

Telephone Number: 970-491-7823      Date: 8/15/2015

Requested Start Date for this Center/Institute/Laboratory: 8/15/2015

\*\*\*\*\*

1. Name of proposed Center or Institute or Other Special Unit (CIOSU):  
**The Center for the Analytics of Learning and Teaching (C-ALT)**
  
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).

James Folkestad	Associate Professor	970-491-7823	
Name	Title	Tel #	Signature
School of Education - 244 Education		james.folkestad@colostate.edu	
Address	Fax #	E-mail Address	

How administrative director was selected: Dr. Folkestad has been a key university leader in analytics research, project development, and faculty focused discussions. He was selected based on his expertise and leadership role.

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)

C-ALT enhances learning and teaching at Colorado State University and in other educational settings by supporting research on the uses of academic analytics, learning analytics (LA), and educational data mining (EDM), and the implementation of the findings into practice. It does so by working in close partnership with three other CSU units: Research and Analytics (RA); Institutional Research, Planning, and Effectiveness (IRPE); and The Institute for Learning and Teaching (TILT). These units play related but distinct roles in supporting the use of academic analytics, LA, and EDM to support CSU students' academic success. The activities of this collaboration are guided by a CSU Learning Data Analytics Committee (Committee), approved in September 2015 by

Provost Miranda and charged “to ensure that the learning enhancement activities under the auspices of the Committee are coordinated and organized to the greatest benefit of CSU” (pg. 1, “Charge to the Learning Data Analytics Committee”).

The primary, and distinctive, role of C-ALT is to facilitate faculty research projects that use academic analytics, LA, and EDM data to investigate questions related to learning and teaching. In contrast, RA focuses primarily on supporting departments, programs, and individual faculty members in assessing the effectiveness of courses and curricula, and only secondarily on promoting faculty members’ research projects. By providing large-scale departmental and institutional data, IRPE offers information that contextualizes the unit- and course-level data produced by C-ALT and by RA. To encourage data-driven course and curriculum redesigns that incorporate assessment and, where appropriate, research components, TILT engages faculty members undertaking such redesigns with C-ALT, RA, and IRPE. Thus these four units collaborate under the guidance of the Committee to promote the use of CSU academic analytics, LA, and EDM data in curricular design and related endeavors.

Because academic analytics, LA, and EDM provide a crucial type of data in this endeavor, and because working with such data is new to most faculty members due to its recent emergence, C-ALT plays an essential role in the larger endeavor of seeking to ground learning and teaching at CSU in research. It does so by supporting faculty research projects in academic analytics, LA, and EDM data—a role that cannot be fulfilled by RA, IRPE, or TILT without C-ALT. That is, C-ALT is the only entity on campus whose primary mission is to support faculty research studies using this type of data; thus C-ALT is spearheading an important new line of research, both on its own and through its collaborations with RA, IRPE, and TILT.

The C-ALT mission, and the mission of the collaboration across all four units, supports CSU’s land-grant heritage of setting the standard for public research universities. It does so by using analytics for improving learning and teaching, advancing analytics research, and helping other teaching and learning organizations (e.g., Poudre School District) in understanding and using this type of data / information for institutional effectiveness.

4. Statement of goals and/or objectives of the proposed unit.

Goal: To share our respective expertise, approaches, and resources with the overall intention of using analytics to improve learning and teaching at CSU.

Objectives: The following objectives have been identified that will support the overall goal:

- Place faculty at the forefront of analytics-driven research on teaching and learning.
- Enable the long-term aspiration for evidence-informed policy at every level, including analyses that will support effective targeting of support and resources.
- Support understanding of analytics, including these key forms of knowledge:
  - How to ask the right questions to get intelligible answers.

- How to design for and collect digital evidence to support claims about learners.
  - How to establish detailed tracking of learning activity outside of testing situations.
  - How to leverage ongoing learning data to make intelligent recommendations.
  - How to change thinking, moving toward assessing students in context (not isolation), collecting information from more natural interactions to better understand students' characteristic learning behaviors, rather than behaviors undertaken in controlled settings.
- Promoting case-study examples and continuing education on analytics research methods.
  - Promote analytics-driven research by bringing guest speakers to the CSU campus
  - Maintain a methodology for identifying and selecting research projects that would benefit from an analytics-driven effort.
  - Provide financial support for learning-analytics projects that have high potential for impacting CSU students. Potential impact will be determined by the Committee.
  - Collaborate with IRPE and RA to establish a systemic approach for data collection and for making data available to instructors, students, and investigators with a focus on conducting research to improve teaching and learning.
  - Enable researchers to find pedagogically useful indicators, predictions and recommendations by evaluating the quality of analytics results in practice.
  - Establish an interdisciplinary team to respond to calls for proposals and compete for external grants that will support work in learning analytics.
  - Conduct applied research to improve curricula and instruction through TILT and support TILT in efforts to distill and apply findings from academic analytics, LA, and EDM research more broadly.
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.)

While C-ALT was originally founded within TILT, then directed by Associate Provost for Instructional Innovation Mike Palmquist, it has taken on the university-wide role described in the response to Question #3, above. Through its own endeavors and through its collaboration with RA, IRPE, and TILT, C-ALT is leading efforts to promote faculty research studies that use academic, LA, and EDM data. This distinctive contribution is crucial to the attempt to ground learning and teaching at CSU in these new forms of data. The Committee's guidance ensures that C-ALT, RA, IRPE, and TILT work collaboratively to support each other's contributions without duplicating efforts.

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



The membership of C-ALT includes faculty, graduate students, and staff from all eight colleges within the university

- College of Agricultural Sciences
- College of Business
- College of Engineering
- College of Health and Human Sciences
- College of Liberal Arts
- Warner College of Natural Resources
- Veterinary Medicine and Biomedical Sciences

The following administrative units have active C-ALT members:

- The Institute for Learning and Teaching (TILT)
- Research and Analytics (RA)
- Institutional Research, Planning, and Effectiveness (IRPE)
- CSU Online (Division of Continuing Education)
- Libraries
- Student Affairs

C-ALT Members list (active):

Sharron Anderson (School of Education – Ethics) Sharon.Anderson@ColoState.EDU

Dan Baker (Engineering) dan.baker@colostate.edu

Karen Gebhardt (Economics) karen.gebhardt@colostate.edu

Pat Burns (Libraries) Patrick.burns@colostate.edu

Sean Burns (CSU Online) - sean.m.burns@gmail.com

Joe Cannon (Business) - Joe.Cannon@business.colostate.edu

Sarah Delozie (Psychology)– delozier@rams.colostate.edu

Karen Gebhardt (Economics) – Karen.Gebhardt@colostate.edu

Gwen Gorzelsky (English; Director, TILT) – Gwen.Gorzelsky@colostate.edu

Dave Johnson (TILT, CSU Online) dave.johnson@colostate.edu

Stan Kruse (TILT) - Stan.Kruse@ColoState.edu

Ingrid Laughman (Chemistry) Ingrid.Laughman@colostate.edu

Paul Laybourn (Biochemistry and Molecular Biology) paul.laybourn@colostate.edu

Tiana Magee (Veterinary School) – Christianne.Magee@colostate.edu

Mike May (Agricultural Sciences) mike.may@colostate.edu

Jennifer McLean (Mycobacteria Research Laboratories) Jennifer.mclean@colostate.edu

Mike Palmquist (English; Associate Provost for Instructional Innovation; Director, CSU Online) mike.palmquist@colostate.edu

Mary Pilgrim (Mathematics) mary.pilgrim@colostate.edu

Matt Rhodes (Psychology) - matthew.rhodes@colostate.edu

Cale Rogers (School of Business) – cale.rogers@colostate.edu

Jennifer Schneider (Institutional Research) j.schneider@colostate.edu

Jose Suarez-Garcia (Department of Foreign Languages and Literatures)

Jose.Suarez\_Garcia@ColoState.EDU

Erica Suchman (Microbiology, Immunology and Pathology)

Erica.suchman@colostate.edu


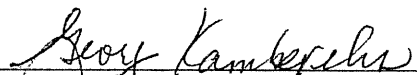
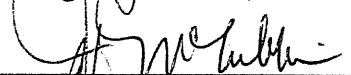
Paul Thayer (Associate Vice President, Student Affairs; Special Advisor to the President)

paul.thayer@colostate.edu

Andrea Weinberg (School of Education) andrea.weinberg@colostate.edu

\*\*\*\*\*

Signatures (See Section B.2.6.3 of the Manual)

		10/27/15
Gwen Gorzelsky, Executive Director	TILT	Date
		10/27/15
George Kamberelis, Director	School of Education	Date
		10/27/15
Jeff McCubbin, Dean	College of Health and Human Sciences	Date

Date Received: August 1, 2015

Month/Year for start of CIOU: November 1, 2015

Anticipated month/year for formal evaluation (biennial evaluation): October 31, 2017

Signatures:

\_\_\_\_\_  
Chair, Faculty Council

\_\_\_\_\_  
Date of FC/Committee Action

\_\_\_\_\_  
Provost or Vice President for Research

\_\_\_\_\_  
Date of Approval

\*\*\*\*\*

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 CIOSU based on its primary mission (See Section B.2.6.3 of the Manual).

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

(Revised 8/11)

## 7. **Organizational structure and budget**

**Organizational and administrative structure and responsibilities.** The following administrative structure has been established.

### **Operations and leadership:**

**Overseeing Administrator:** Dr. Rick Miranda will serve as the Overseeing Administrator and will appoint both the Responsible Administrator and the Administrative Director of C-ALT.

**Responsible Administrator:** Dr. Gwen Gorzelsky (Director of TILT) will serve as the Responsible Administrator for C-ALT and will be responsible for the following:

- Schedule the biennial report

**Administrative Director:** Dr. James Folkestad will serve as the Administrative Director and will be responsible for the following

- Maintaining C-ALT direction, including mission, objectives, and measurable outcomes
- Submit a brief biennial report of C-ALT activities and accomplishments to the Overseeing Administrator and the Responsible Administrator

### **Learning Data Analytics Committee (the ‘Committee’):**

The Committee’s guidance ensures that C-ALT, RA, IRPE, and TILT work collaboratively to support each other’s contributions without duplicating efforts (see question #3 above).

**Financial Support:**

The following administrative units will provide financial support.

- Division of Continuing Education (DCE)
- The Institute for Learning and Teaching (TILT)
- Libraries

**Budget / funding:**

CSU Online, ACNS, and TILT will provide a \$73,100.00 base budget for the first three years of the C-ALT-CIOSU to seed the startup of C-ALT. A line item budget and justification are provided below.

**Budget (annual):**

Item	Amount
Salary & course buyout	\$50,100.00
Travel	\$10,000.00
Equipment	\$3,000.00
Pilot project support	\$10,000.00
<b>Total</b>	<b>\$73,100.00</b>

**Budget justification:** The following provides justification for each item within the budget.

**Salary & course buyout:** Salary and course buyout will be provided to the C-ALT Director. This will allow the Director to time to direct C-ALT and develop analytics-driven projects that will benefit CSU, Unizin, and the Reinvention Center.

**Travel:** Travel funding will allow the C-ALT Director to travel to present findings at national conferences related to analytics.

**Equipment:** An equipment budget will allow the C-ALT Director to purchase equipment related to the analytics effort.

**Pilot project support:** Funding will be used to support project startups. Projects will be selected that have high potential to generate external funding or significant impact on CSU, Unizin, and / or the Reinvention Center. The C-ALT Steering Committee will select projects to receive funding based on criteria.