

UNIVERSITY CURRICULUM COMMITTEE AGENDA
2:00 p.m., Friday, December 2, 2016
106 Administration, Provost Conference Room

Note: If you are unable to attend or will be sending a substitute, please notify [Carole Makela](mailto:Carole.Makela@colostate.edu) (1-5141) or [Curriculum Catalog@colostate.edu](mailto:Curriculum_Catalog@colostate.edu) (1-2429) prior to the meeting.

MINUTES – Minutes of November 11, 2016

ANNOUNCEMENTS

1. The Executive Committee put UCC minutes of October 21 and 28 (11/15) and the minutes of November 4 (11/29) on the agenda of Faculty Council for 12/6/16.
2. The special action item for the Masters of Addiction Counseling was prepared for the 12/6/16 Faculty Council meeting. And has been placed on the FC agenda by EC.
3. Also on the 12/6/16 Faculty Council agenda will be the ‘graduate specializations (revised) reading Graduate Specializations (under the heading GRADUATE STUDY in the Graduate and Professional Bulletin) ‘Within graduate degree programs, certain well-defined “specialization” may be offered. A Graduate Specialization is a formal Faculty Council approved program with a defined curriculum addressing a specialty within one of the graduate degree programs. Specialization are automatically listed on Transcripts. Please visit the Graduate School website for a listing of degree and available specializations.’
4. The new major in Women and Gender Studies will be reviewed by the Council of Deans at an upcoming meeting (has been about 2 years since its previous review), likely early spring.
5. Please review the minutes especially for items from your college every week—we hope to lessen ‘didn’t catch that’ as much as possible.
On each week’s consent agenda please review items asking ‘do these changes in courses prompt changes in programs?’ Also give experimental courses a review.
6. For your calendars and to share with your college, a curriculum training session will be offered at the [38th Annual Professional Development Institute \(PDI\)](#).

Title: “Curriculum: from Department to Degree Audit (and everything in between)”

Date: Tuesday, January 10, 2017

Time: 8:30-9:30 am

Room: 376-78 Lory Student Center

Presenters: Katie Risheill, Andrea Russo, Shelly Ellerby

Description: Providing an opportunity to campus to learn about the University Curriculum process from input into CIM/CAT through approval. This will also inform on the cycle of the General Catalog as well as when and how approved changes are implemented in the Degree Audit.

CONSENT AGENDA

See listing after New Business.

CIM Considerations

CIM Forms
CIM Processes
CIM Help Bubble

PENDING CoSRGE

New Program Proposals:

- [Ph.D. in Anthropology](#)
- [Graduate Certificate in Adventure Tourism](#)
- [Graduate Certificate in Nutrition for Health Promotion](#)
- [Graduate Certificate in Agritourism Management](#)
- [Master of Music, Music Education, Composition Emphasis](#)
- [Graduate Certificate in Business Analytics and Accounting Systems](#)

OTHER BUSINESS

1. **Discussion Item: UCC Committee Responsibilities and Operating Procedures**

[UCC Committee Responsibilities – Faculty Manual Section C:](#)

k. University Curriculum Committee (last revised June 22, 2006)

The University Curriculum Committee shall consist of one (1) faculty representative from each college and the Libraries, one (1) undergraduate student, one (1) graduate student, and the Provost or his or her designee (ex officio). The duties of this standing committee shall be:

1. To receive or initiate recommendations pertaining to each and every course and program offered for academic credit by any unit of the University.
2. To evaluate all proposals for new undergraduate courses and programs as well as changes in existing courses and programs for correlation with other departments before consideration and approval by the Faculty Council.
3. To evaluate all proposals for new graduate courses and programs as well as changes in existing courses and programs for correlation with other departments. Review of graduate programs is conducted after the Committee on Scholarship, Research, and Graduate Education has recommended approval prior to their submission to the Faculty Council for approval.
4. To develop necessary administrative procedures for informing interested colleges concerning courses under consideration.
5. To evaluate proposals for the establishment of new departments, and the change of academic name, change in college affiliation, dissolution, division, or merger of existing departments.
6. To recommend policies to the Faculty Council related to the operations of the Division of Continuing Education which impact curricula.

[UCC Operating Procedures](#)

OLD BUSINESS

New Courses

Effective Term

College of Liberal Arts

[ART 521](#) **ART 521 Art and Environment – Advanced Study 3(3-0-0) F, S, SS** Fall 2017

Prerequisite: None.

Registration Information: Graduate standing in the Art and Art History Department. Required field trips.

Description: Interdisciplinary studio/seminar course investigating art's relationship to the environment through readings, field trips, presentations and studio practice.

Grade Mode: Traditional.

Offering Term: As Needed.

Reason for Request: This course has been taught as an experimental course twice and enrollment numbers indicate that there is interest in making the course permanent. The course fills a gap in offerings by blending seminar-type discussion of issues with studio practice in an interdisciplinary studio setting.

College of Natural Sciences

[PSY 677](#) **PSY 677 Psychology of Women, Men, and Gender 3(0-0-3) F, S, SS** Fall 2017

Prerequisite: None.

Registration Information: None.

Description: Focuses on the psychology of women, men and gender, by intersectionalities, and in cultural, transnational context. Topics include gendered life paths; gender and the media; gender and relationships; gender and health, gender and work; and gender and globalization.

Grade Mode: Traditional.

Offering Term: Fall.

Reason for Request: The course is relevant to the Psychology graduate programs as well as the Ethnic Studies proposed graduate certificate on gender and power. To appear with its own title (and for example, to be listed in the Ethnic Studies certificate) it needs its own number, hence this request.

Major Changes to Courses

Effective Term

College of Veterinary Medicine and Biomedical Sciences

[VM 745](#)

VM 745 Clinical Sciences I 5(5-0-0) S

Spring 2017

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Registration Information: Admission to ~~professional curriculum in veterinary medicine~~ [the Doctorate of Veterinary Medicine Program](#). All courses must be taken in prescribed sequence in the ~~PVM~~ [DVM](#) program. [This is a partial semester course.](#)

Description: Diagnostic approaches to common medical problems of the [gastrointestinal tract \(including dentistry\)](#), [liver / pancreas](#), ~~cardiovascular, urinary,~~ and [endocrine systems in small animal, food animal, and equine species are covered](#). ~~digestive hepatic systems.~~ [A clinical reasoning process for approaching clinical problems is reviewed and reinforced.](#)

Grade Mode: Traditional.

Reason for Request: Current description of the body systems the course covers is incorrect.



New Graduate Certificates

Warner College of Natural Resources

Effective Fall 2017

Department of Fish/Wildlife/Conservation Biology

Graduate Certificate in Conservation Actions with Lands, Animals, and People

[Link to CIM](#)

Reason for Request: All courses in the Certificate have been approved at the 500 level for Online delivery through the curriculum review process at CSU and all content has been taught over time. The goal is to facilitate opportunities for persons who have baccalaureate degrees to fill gaps in timing, content, and outcomes of education. Types of audiences include persons who may eventually seek graduate degrees, established professionals in natural resources fields needing relevant continuing education, educated persons seeking career changes, and for persons outside of natural resources who desire and will benefit from courses that help with holistic understanding and actions toward their role in society and with land, animals, and people. A certificate helps to provide a thoughtfully managed and integrated link to education beyond the random selection of courses.

Additional coursework may be required due to prerequisites.

Code	Title	Credits
Select a minimum of 3 courses:		9
FW 556	Leopold's Ethic for Wildlife and Land	
FW 557	Wildlife Habitat Management on Private Land	
FW 576	Wildlife Policy, Administration, and Law	
NR 501	Leadership and Public Communications	
NR 515	Natural Resources Policy and Biodiversity	
NR 535	Action for Sustainable Behavior	
Program Total Credits		9

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



NEW BUSINESS

New Courses

Effective Term

College of Health and Human Sciences

<p><u>FSHN 530</u></p>	<p>FSHN 530 Principles of Nutrition Science & Metabolism 3(3-0-0) F, S, SS Fall 2017</p> <p>Prerequisite: BMS 300 or CHEM 245 or LIFE 102. Registration Information: Graduate standing. Offered as an online course only. Description: Science of nutrition, including the ingestion and digestion of food, the absorption, transport, and metabolism of macro and micronutrients, energy balance and bodyweight regulation, and relationships to health and risk of disease. Structure, functional roles, and metabolic regulation of carbohydrates, lipids, and proteins during conditions of fasting, feeding, and exercise. The role of vitamins and minerals in cellular and whole body homeostasis. Grade Mode: Traditional.</p>
<p>Reason for Request:</p>	<p>This course is to be included in the graduate certificate. This course will serve as the foundational nutrition science course that is the prerequisite for the other 2 courses in the certificate.</p>
<p><u>FSHN 531</u></p>	<p>FSHN 531 Diet, Nutrition, and Chronic Disease 3(2-0-1) S Spring 2018</p> <p>Prerequisite: FSHN 530. Registration Information: Graduate standing. Offered as an online course only. Description: Principles related to the role of diet and nutrition in obesity, digestive health, type 2 diabetes, cardiovascular disease, and cancer with a focus on current evidence and best practices for prevention. Grade Mode: Traditional</p>
<p>Reason for Request:</p>	<p>This course is to be included in the Graduate Certificate in Nutrition for Health Promotion. Obesity and chronic disease affect millions of people. The role of nutrition in reducing risk for these conditions is an important area of study for individuals and health professionals alike.</p>
<p><u>FSHN 532</u></p>	<p>FSHN 532 Emerging Issues in Nutrition 3(2-0-1) F Fall 2018</p> <p>Prerequisite: FSHN 530. Registration Information: Graduate standing. Offered as an online course only. Description: Principles related to emerging areas of nutrition and their role in health promotion. Focus is on current research related to micronutrients and supplements, sports nutrition, food safety and technology, food systems, nutrition and aging, and nutrigenomics. Grade Mode: Traditional</p>
<p>Reason for Request:</p>	<p>This course is to be included in the Graduate Certificate in Nutrition for Health Promotion. Nutrition knowledge and research changes rapidly. This course will allow learners to engage with current research on important areas of nutrition in health promotion.</p>
<p><u>SOWK 200</u></p>	<p>SOWK 200 Academic and Career Success 1(1-0-0) F, S Fall 2017</p> <p>Prerequisite: None. Registration Information: Undergraduate standing. This may be offered as a partial semester course. Description: Skills for general academic success, personal growth, self-management, and knowledge of campus/community resources. Examination of professional opportunities within the field of social work. Grade Mode: Traditional</p>
<p>Reason for Request:</p>	<p>To enhance academic success for students entering the social work major, and to offer students the opportunity to gain knowledge and skills that will aid their preparation for a career in social work.</p> <p>Sections may be offered in partial semester (8-weeks) or full semester (16 weeks).</p>

College of Liberal Arts

- [ANTH 379](#) **ANTH 379 Evolutionary Medicine and Human Health 3(3-0-0) F** Fall 2017
Prerequisite: ANTH 120 OR BZ 101.
Registration Information: Sophomore standing.
Description: Evolutionary medicine refers to the application of evolutionary theory to the study of human health, disease, and modern medicine. This theoretical perspective provides a deeper lens with which to investigate health, moves us beyond mechanistic explanations of disease, and constructs an anthropological framework for interpreting the evolution of human physiological diversity.
Grade Mode: Traditional
Reason for Request: This course supports the Anthropology department by strengthening the Biological Anthropology concentration and by expanding course offerings in Medical Anthropology. The learning objectives of these anthropological subfields include analyzing evolutionary theory and comparing and contrasting the roles of biology and culture in human adaptation. This course aligns with these objectives by investigating human health from an evolutionary perspective and by evaluating the relationship between modern human lifestyles and disease.
- [ART 421](#) **ART 421 Art and Environment 3(3-0-0) As Needed** Fall 2017
Prerequisite: ART 136; ART 160; ART 170; 6 credits of 200-level art courses.
Registration Information: Required field trips.
Description: Interdisciplinary studio/seminar course investigating art's relationship to the environment through readings, field trips, presentations and studio practice.
Grade Mode: Traditional
Reason for Request: This course has been taught as an experimental course twice and enrollment numbers indicate that there is interest in making the course permanent. The course fills a gap in offerings by blending seminar-type discussion of issues with studio practice in an interdisciplinary studio setting.
- [E 643](#) **E 643 Special Topics in Literary Craft 3(3-0-0) As Needed** Fall 2017
Prerequisite: None.
Restriction: Must be a Graduate, Professional.
Registration Information: Admission into MA English or MFA Creative Writing Programs.
Description: A seminar-based class combining creative and craft-based experiments with traditional literary critical approaches to various topics utilizing poetry, fiction, creative non-fiction, and other alternate hybrid genres.
Grade Mode: Traditional
Reason for Request: Recent student and faculty surveys have revealed both desire and programmatic need for courses that merge creative and critical literary studies. Such a course will help all English and Creative Writing students achieve a greater mastery in their given fields.
- [MU 127](#) **MU 127 Aural Skills 1 1(0-2-0) F** Fall 2017
Prerequisite: None.
Registration Information: Must have concurrent registration in MU 117.
Description: Introduction to aural skills, including melodic dictation (one- and two-part), diatonic harmonic dictation; rhythmic dictation in simple and compound meters; prepared singing and sight singing.
Grade Mode: Traditional
Reason for Request: Currently the School of Music, Theatre, and Dance offers aural skills as part of the written music theory course sequence (MU 117, 118, 217, 218). Separating aural skills material into a new course will improve pedagogy because it will be taught in smaller classes and allow for more one-on-one instruction. As students receive separate grades for written and aural work, they can advance in the curriculum in written theory while repeating aural skills courses if necessary (or vice versa), thus improving retention of undergraduates. In this way, the theory curriculum will allow for better degree progress across majors. Separating these courses will also improve assessment in both courses.

MU 128	<p>MU 128 Aural Skills II 1(0-2-0) S</p> <p>Prerequisite: MU 127. Registration Information: Must have concurrent registration in MU 118. Description: Further introduction to aural skills, including melodic dictation (one- and two-part), diatonic harmonic dictation; rhythmic dictation in simple and compound meters; prepared singing and sight singing in new clefs. Grade Mode: Traditional</p>	Fall 2017
Reason for Request:	<p>Currently the School of Music, Theatre, and Dance offers aural skills as part of the written music theory course sequence (MU 117, 118, 217, 218). Separating aural skills material into a new course will improve pedagogy because it will be taught in smaller classes and allow for more one-on-one instruction. As students receive separate grades for written and aural work, they can advance in the curriculum in written theory while repeating aural skills courses if necessary (or vice versa), thus improving retention of undergraduates. In this way, the theory curriculum will allow for better degree progress across majors. Separating these courses will also improve assessment in both courses.</p>	
MU 132	<p>MU 132 Exploring World Music 3(3-0-0) F, S, SS</p> <p>Prerequisite: None. Registration Information: None. Description: Global aspects of music and its meaning with connections to the environment, sound, and world cultures. Grade Mode: Traditional [proposed new AUCC 3E: Global & Cultural Aware]</p>	Fall 2017
Reason for Request:	<p>Departmental and campus-wide student interest in 21st century global music topics, which is currently not offered.</p>	
MU 151A <i>Major course change</i>	<p>MU151A <u>Piano Class II: Music Education</u> Piano Skills for Music Educators 1(0-2-0) F,S</p> <p>Prerequisite: MU 150. Registration Information: <u>Credit allowed for only one of the following: MU 151, MU 151A or MU 151B.</u> Description: <u>Intermediate Piano Skills</u> Intermediate piano technique and appropriate sightreading skills for music educators. Grade Mode: <u>Traditional S/U-Sat/Unsat Only</u></p>	Fall 2017
Reason for Request:	<p>This course currently exists as MU 151: Piano Skills for Music Educators. However, there is no equivalent course offered for Performance or Composition Majors, or BA-Music students. This new course proposal is not really new. It is simply a renumbering to allow for MU 151A and MU 151B (and any potential other future second semester piano classes) as different subtopics.</p>	
MU 151B	<p>MU 151B Piano Class II 1(0-2-0) S</p> <p>Prerequisite: MU 150. Registration Information: Credit allowed for only one of the following: MU 151, MU 151A or MU 151B. Description: Intermediate Piano Skills Grade Mode: Traditional</p>	Fall 2017
Reason for Request:	<p>Currently there is no 2nd semester piano offering for B.M. performance and composition concentrations, or for B.A. students. This course will help students with piano skills necessary for success in their Music Theory III and IV courses.</p>	
MU 227	<p>MU 227 Aural Skills III 1(0-1-0) F</p> <p>Prerequisite: MU 128. Registration Information: Must have concurrent registration in MU 217. Description: Intermediate aural skills, including dictation of chromatic melodies (one- and two-part), diatonic harmonic dictation with chromatic embellishments; rhythmic dictation in simple and compound meters; prepared singing and sight singing in new clefs. Grade Mode: Traditional</p>	Fall 2017

Reason for Request: Currently the School of Music, Theatre, and Dance offers aural skills as part of the written music theory course sequence (MU 117, 118, 217, 218). Separating aural skills material into a new course will improve pedagogy because it will be taught in smaller classes and allow for more one-on-one instruction. As students receive separate grades for written and aural work, they can advance in the curriculum in written theory while repeating aural skills courses if necessary (or vice versa), thus improving retention of undergraduates. In this way, the theory curriculum will allow for better degree progress across majors. Separating these courses will also improve assessment in both courses.

[MU 228](#)

MU 228 Aural Skills IV 1(0-1-0) S

Fall 2017

Prerequisite: MU 227.

Registration Information: Must have concurrent registration in MU 218.

Description: Advanced aural skills for chromatic music; chromatic and atonal melodic dictation; modulating harmonic dictation and atonal pitch patterns; rhythmic dictation of techniques from music since 1900; prepared singing and sight singing of chromatic and atonal melodies.

Grade Mode: Traditional

Reason for Request: Currently the School of Music, Theatre, and Dance offers aural skills as part of the written music theory course sequence (MU 117, 118, 217, 218). Separating aural skills material into a new course will improve pedagogy because it will be taught in smaller classes and allow for more one-on-one instruction. As students receive separate grades for written and aural work, they can advance in the curriculum in written theory while repeating aural skills courses if necessary (or vice versa), thus improving retention of undergraduates. In this way, the theory curriculum will allow for better degree progress across majors. Separating these courses will also improve assessment in both courses.

[MU 511](#)

MU 511 Advanced Arranging for Educational Ensembles 3(3-0-0) F

Fall 2017

Prerequisite: MU 318.

Registration Information: None.

Description: Arranging and scoring skills related to elementary, choral, wind band, orchestral, and jazz ensembles in K-12 music classrooms. Publishing concerns and intellectual property rights related to both composing and arranging for educational ensembles.

Grade Mode: Traditional

Offering Year: Odd.

Reason for Request: Currently, the School of Music, Theatre and Dance does not offer any coursework specifically related to composing/arranging for educational ensembles at the elementary and secondary levels. This new course is intended to address this need, as it is an essential discipline for the proposed Master of Music in Music Education (composition emphasis). Additionally, this course will have strong interest from upper division and graduate students in the music composition and music education degree programs.

[MU 512](#)

MU 512 Pedagogy of Musical Creativity 3(3-0-0) F

Fall 2017

Prerequisite: MU 317.

Registration Information: None.

Description: Theory and application of creative musical skills as applied in K-12 music classrooms. Includes pedagogy of improvisation and composition, pedagogy of music theory and aural skills, and the application of original creative works in music classrooms.

Grade Mode: Traditional

Reason for Request: This course will be required for the proposed Master of Music in Music Education - Composition Emphasis program. The course is intended to provide instruction in the development of curriculum for music composition, improvisation and analysis as no current course offering directly addresses this content. The course will further broaden and enrich the current graduate offerings in music education for all relevant degree programs.

Warner College of Natural Resources[GEOL 201](#)**GEOL 201 Field Geology of the Colorado Front Range 1(0-2-0) F**

Fall 2017

Prerequisite: GEOL 150 or GEOL 121.**Registration Information:** Freshman, Sophomore or Junior standing only. Geology majors or minors only. This is a partial semester course. Required field trips.**Description:** Geology of the Rocky Mountain Front Range taught primarily through field trips and field exercises, emphasizing hands-on experiences. Learn to make basic field observations and measurements on a variety of rock types and surficial features.**Grade Mode:** Traditional**Reason for Request:**

CSU is fortunate to have a wealth of geological features that are close at hand and highly useful for a wide variety of educational experiences relevant to the geology major. Geology majors benefit greatly from seeing geological features and processes in the field, and by practicing geologically relevant methodologies (e.g., identifying minerals, classifying rocks and interpreting textures, mapping the distribution of lithologies and structures, measuring the orientations of lithologic contacts and structures, identifying and describing surficial units, describing and interpreting stratigraphic relationships, measuring the rates of processes, etc.). Currently, somewhat limited opportunities occur for students to learn these concepts and skills early in the geology major or minor. It is especially important to connect the classroom to the field while students are at this formative and influential juncture in their education and, frequently, in their geosciences career directions. In our present curriculum, students do not typically receive intensive field training until their junior or senior year. This course is intended to bring students into a field-setting at the sophomore level, after they have had at least one, and possibly two or three geology courses. The course will build on their basic knowledge and allow them to learn and practice the basic field techniques that are the keystones of making important observations and extracting data from the field. Finally, the course is unique in our curriculum by focusing specifically on the iconic and highly instructive geology of the Colorado Front Range. By exposing students to the complete geologic history of Colorado, this course will also complement and supplement field-based exercises in other geoscience courses.

College of Natural Sciences[BZ 565/](#)
[MIP 565](#)**BZ 565/MIP 565 Next Generation Sequencing Platform/Libraries 1(0-2-0) F**

Fall 2017

Prerequisite: CM 505.**Registration Information:** This is a partial semester course.**Description:** Theoretical and experimental aspects of next generation sequencing experiments with a focus on the Illumina platform. Students will create and sequence metagenomic and 16S rDNA libraries from soil samples and unknown bacterial cultures.**Grade Mode:** Traditional**Reason for Request:**

Over the last decade, next generation sequencing (NGS) has become a widely used approach to understand and characterize biological processes. However, due to the rapid rise of this technology most faculty, even within the life sciences, have little hands-on experience. This makes it challenging for them to provide adequate training for graduate students.

This course addresses this gap by providing training in both the experimental design and practical aspects of creating a library for NGS. The course will be of value to both life scientists and biomedical engineers engaged in research involving NGS approaches. Furthermore the course will also be open to Statistics, Mathematics and Computer Science graduate students who routinely analyze and model data generated through NGS.

[CHEM 499](#)**CHEM 499 Senior Thesis 2(2-0-0) F, S, SS**

Fall 2017

Prerequisite: CHEM 487 or CHEM 498.**Registration Information:** Senior standing. Written consent of department chair.**Description:** Preparation of a written thesis and an oral defense, based upon undergraduate research performed on an internship experience. At least two faculty members, including the undergraduate thesis advisor will evaluate the thesis and defense.**Grade Mode:** Traditional

[proposed new AUCC 4C: Capstone Experience for the following:
Major in Chemistry, Non-ACS Certified Concentration
Major in Chemistry, ACS Certified Concentration]

Reason for Request: Many chemistry majors pursue independent research projects in the laboratories of research active faculty and/or in internships off site. Allowing students to write a thesis and present it orally enhances the students' experiences comprised by these projects. The culmination of independent research pursued at CSU or in an internship as a written thesis and oral presentation/defense permit this highly creative activity into a true capstone experience. The chemistry department has approved allowing students to use the honors thesis as a capstone experience. This course will give chemistry students not in the University Honors Program a second option to the current capstone offered.

[NSCI 677](#) **NSCI 677 Microscopic Image Collection & Processing 2(2-0-0) F** Fall 2017
Prerequisite: (CS 155) and (CS 156) and (STAT 511, may be taken concurrently) and (GRAD 510, may be taken concurrently).
Registration Information: None.
Restriction: Must be a Graduate: Professional.
Description: Modern microscopes generate terabytes of data presenting challenges for acquisition, long-term storage and extracting meaningful information to present it in an appropriate way for publication. This course covers fundamentals of data collection, storage and processing. Students will learn different software applications, ranging from commercial to technical computing languages and will develop their own data processing algorithms to synthesize publication-quality images from large data sets.
Grade Mode: Traditional

Reason for Request: Modern microscopes routinely generate gigabytes to terabytes of raw image data in a single imaging session, presenting a challenge for their collection, transmission, and long-term storage. Another challenge is extracting meaningful information from such large amounts of raw data, and presenting that information in a way that is appropriate for publication. This course covers the fundamentals of data collection and storage, as well as data processing and image analysis. This course will be part of the Professional Science Masters degree in Microscope Imaging Technology.

Intra-University

[GES 460](#) **GES 460 Law and Sustainability 3(3-0-0) F** Fall 2017
Prerequisite: GES 101.
Registration Information: Written consent of instructor.
Description: Introduction to the domestic and international laws that influence and interact with the implementation of sustainability in the U.S. and abroad.
Grade Mode: Traditional

Reason for Request: The course has been successfully taught as an experimental course for the past two years. The course fulfills a need for this subject area that is not currently addressed in other courses and provides students with knowledge and skills necessary to address issues regarding the implementation of sustainability solutions across a range of disciplines.

[MLSC 235](#) **MLSC 235 Military Tactical Leadership 1(0-2-0) F** Fall 2017
Prerequisite: None.
Registration Information: Written consent of instructor.
Description: Selected topics in physiology, engineering, geology/terrain analysis, and sociology/human behavior; this subject matter will inform the basic military skills needed to train for and compete in the Ranger Challenge. Physical conditioning is a significant component of this class.
Grade Mode: Traditional

Reason for Request: The Military Science program provides students with universal leadership concepts and the basic principles of military arts and sciences. This proposed course will provide cadets with an opportunity to apply military tactics, techniques, and procedures in a realistic setting by training for and participating in an Army sponsored national competition (Ranger Challenge). Anticipated enrollment is 15 to 20.

Major Changes to Courses

Effective Term

College of Liberal Arts

<u>ANTH 370</u>	<p>ANTH 370 Primates Primate Behavior and Ecology 3(3-0-0) As Needed S Fall 2017</p> <p>Prerequisite: ANTH 120 or BZ 101. Registration Information: Sections may be offered: Online. Description: Behavioral patterns, ecological relationships, and communication of nonhuman primates. Grade Mode: Traditional <u>Student Option</u> Offering Year: Every <u>Even</u> <u>[proposed new AUCC 4A: Using Competencies for the following:</u> <u>Major of Anthropology</u> <u>Major of Anthropology, Archaeology Concentration</u> <u>Major in Anthropology, Biological Anthropology Concentration</u> <u>Major in Anthropology, Cultural Anthropology Concentration</u> <u>Major in Anthropology, Geography Concentration</u></p>
Reason for Request:	<p>ANTH 370 should be designated as a 4A course in order to broaden student course offerings in this category.</p>
<u>ETST 205</u>	<p>ETST 205 Ethnicity and the Media 3(3-0-0) F Fall 2017</p> <p>Prerequisite: None. Registration Information: <u>Sections may be offered: Online.</u> Description: Ethnic representation across time as represented in auto/biography, fiction, poetry, and popular media. Grade Mode: Traditional [existing AUCC 3E: Global & Cultural Awareness]</p>
Reason for Request:	<p>We are preparing to create an online minor and this will be one of our offered courses.</p>
<u>ETST 332</u>	<p>ETST 332 Contemporary Chicana <u>Chicanx</u> Chicana/o Issues 3(3-0-0) S Fall 2017</p> <p>Prerequisite: None. Registration Information: None. Description: Current <u>Chicanx</u> Chicana/o issues including conquest, immigration, urbanization, health in context of societal trends. Grade Mode: Traditional</p>
Reason for Request:	<p>Course title change reflects the trend in the field.</p>
<u>ETST 454/SPCM 454</u>	<p>ETST 454/SPCM 454 Chicana <u>Chicanx</u> Chicana/o Film and Video 3(2-2-0) F Fall 2017</p> <p>Prerequisite: ETST 100-499 or SPCM 100-499 - at least 3 credits. None. Registration Information: Must register for lecture and laboratory. <u>Sophomore standing.</u> Credit not allowed for both ETST 454 and SPCM 454. Description: Emergence of <u>Chicanx</u> Chicana/o cinema from a place of displacement, resistance, and affirmation found in contemporary <u>Chicanx</u> Chicana/o film, video. Grade Mode: Traditional</p>
Reason for Request:	<p>The binary term “Chicana/o” is being changed to the non-gender-specific “Chicanx” to reflect current usage in the discipline.</p>
<u>MU 118</u>	<p>MU 118 Music Theory II 34(3-20-0) S Fall 2017</p> <p>Prerequisite: MU 117. None. Registration Information: Must register for lecture and laboratory. None. Description: Four-part diatonic writing; diatonic <u>sequences modulation; diatonic sight singing, ear training,</u> and <u>related linear techniques; diatonic modulation keyboard harmony skills.</u> Grade Mode: Traditional</p>

Reason for Request: The curriculum for this course is being revised to remove the aural skills (ear-training) component from the current course with creation of a separate aural skills course. The primary rationale is that by separating aural skills from written music theory, a dedicated amount of instructional time will be devoted specifically to each set of skills. Hence, both assessment and instructional efficiency will be improved. Most comparable peer institutions utilize a similar curricular model for their undergraduate music theory and aural skills sequences. This change was initiated upon the recommendation of the music theory faculty and was approved by the music undergraduate curriculum committee.

[MU 217](#)

MU 217 Music Theory III ~~34(3-02-0)~~ **F**

Fall 2017

Prerequisite: MU 118.

Registration Information: ~~Must register for lecture and laboratory.~~ None.

Description: Introduction to chromatic harmony; analysis of small forms. ~~Harmonic language of the 17th and 18th centuries; diatonic and chromatic sight singing, ear training, and keyboard harmony skills.~~

Grade Mode: Traditional

Reason for Request: The curriculum for this course is being revised to remove the aural skills (ear-training) component from the current course with creation of a separate aural skills course. The primary rationale is that by separating aural skills from written music theory, a dedicated amount of instructional time will be devoted specifically to each set of skills. Hence, both assessment and instructional efficiency will be improved. Most comparable peer institutions utilize a similar curricular model for their undergraduate music theory and aural skills sequences. This change was initiated upon the recommendation of the music theory faculty and was approved by the music undergraduate curriculum committee.

[MU 218](#)

MU 218 Music Theory IV ~~34(3-02-0)~~ **S**

Fall 2017

Prerequisite: MU 217.

Registration Information: ~~Must register for lecture and laboratory.~~ None.

Description: Introduction to sonata form analysis; Introduction to post-tonal music analysis ~~Late 18th and early 19th century harmonic and formal language; diatonic, chromatic, and modal sight singing, ear training, and keyboard harmony skills.~~

Grade Mode: Traditional

Reason for Request: The curriculum for this course is being revised to remove the aural skills (ear-training) component from the current course with creation of a separate aural skills course. The primary rationale is that by separating aural skills from written music theory, a dedicated amount of instructional time will be devoted specifically to each set of skills. Hence, both assessment and instructional efficiency will be improved. Most comparable peer institutions utilize a similar curricular model for their undergraduate music theory and aural skills sequences. This change was initiated upon the recommendation of the music theory faculty and was approved by the music undergraduate curriculum committee.

[WS 200](#)

WS 200 Introduction to Women's Studies **3(3-0-0) F, S, SS**

Fall 2017

Prerequisite: None.

Registration Information: Sections may be offered: Online.

Description: Examination of gender roles in work, education, spirituality, relationships, health, institutions and organizations.

Grade Mode: Traditional

[\[proposed new AUCC 3C: Social/Behavioral Science\]](#)

Reason for Request: This course provides a gender option for the AUCC Category C requirement in the social sciences and behavioral sciences.

College of Veterinary Medicine and Biomedical Sciences

[VS 661](#)

VS 661 Neurology and Neurosurgery Laboratory 1(0-~~23~~-0) S

Fall 2017

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Registration Information: [This is a partial semester course.](#) DVM degree or equivalent professional medicine degree required.

Description: [Laboratory practice of comparative neurology \(large and small animal\), neurosurgical techniques and procedures.](#) ~~Production and correction of surgically amenable lesions in central and peripheral nervous system; electrodiagnosis.~~

Grade Mode: Traditional

Permanent Partial Semester: [Yes](#) ~~No~~

Term Offered: Spring (every third year).

Reason for Request:

This course had been offered under previous faculty in Neurology who are no longer present at CSU. Materials were not available for use by the current faculty, and the scant info available from past syllabi appears to have not been adequate for fulfilling contact hour requirements as listed in the archived curriculum committee documentation for the lecture/lab combination course (VS660/661). Further, a comparative aspect to the course was desired by all LA and SA faculty involved in neurological cases, and thus content has changed. The lectures on this topic, as presumably presented in VS660, are already presented under VS701-VS704 series (Post-graduate Medicine I, II, III, IV). For these reasons, we request a major course revision to update the content of VS661 (1 credit laboratory course) using a comparative approach to species, and to drop the VS 660 component of the course (VS 600 deactivation request submitted separately).



Major Changes to Existing Programs

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

Effective Fall 2017
[Link to CIM](#)

Reason for Request: These revisions allow alignment with the ordering of 300-level ECE classes and clarification of ECE technical electives. Also designates BIOM 431 as a required course, now that it is no longer in experimental status.

Effective Fall 2017 ~~2016~~

FRESHMAN		AUCC	CREDITS
BIOM 101	Introduction to Biomedical Engineering		3
CHEM 111	General Chemistry I (GT-SC2)	3A	4
CHEM 112	General Chemistry Lab I (GT-SC1)	3A	1
CO 150	College Composition (GT-CO2)	4A	3
Select one group from the following:		-	3-4
Group A:		-	-
CS 155	Introduction to Unix	-	-
CS 156	Introduction to C Programming I	-	-
CS 157	Introduction to C Programming II	-	-
Group B:		-	-

CS 163 or 164	Java (CS1) No Prior Programming Java (CS1) Prior Programming	-	-
<u>CHEM 113</u>	<u>General Chemistry II</u>	-	<u>3</u>
<u>ECE 102</u>	Digital Circuit Logic		4
<u>ECE 103</u>	DC Circuit Analysis		3
<u>MATH 160</u>	Calculus for Physical Scientists I (GT-MA1)	1B	4
<u>MATH 161</u>	Calculus for Physical Scientists II (GT-MA1)	1B	4
<u>PH 141</u>	Physics for Scientists and Engineers I (GT-SC1)	3A	5
Additional Requirements for Graduation ¹			0
Total Credits			<u>3134-35</u>

SOPHOMORE

CHEM 113	General Chemistry II		3
<u>CO 150</u>	<u>College Composition (GT-CO2)</u>	<u>1A</u>	<u>3</u>
<u>Select one group from the following:</u>		-	<u>3-4</u>
<u>Group A:</u>		-	-
<u>CS 155</u>	<u>Introduction to Unix</u>	-	-
<u>CS 156</u>	<u>Introduction to C Programming I</u>	-	-
<u>CS 157</u>	<u>Introduction to C Programming II</u>	-	-
<u>Group B:</u>		-	-
CS 163 or 164	Java (CS1) No Prior Programming Java (CS1) Prior Programming	-	-
<u>ECE 202</u>	Circuit Theory Applications		4
ECE 251	Introduction to Microprocessors	-	4
<u>ECE 303/STAT 303</u>	<u>Introduction to Communications Principles</u>	-	<u>3</u>
<u>LIFE 102</u>	Attributes of Living Systems (GT-SC1)	3A	4
<u>MATH 261</u>	Calculus for Physical Scientists III		4
<u>Select one course from the following:</u>			4
<u>MATH 340</u>	Introduction to Ordinary Differential Equations		
<u>MATH 345</u>	Differential Equations		
MECH 337	Thermodynamics	-	4
<u>PH 142</u>	Physics for Scientists and Engineers II (GT-SC1)	3A	5
Additional Requirements for Graduation ¹			0
Total Credits			<u>30-3132</u>

JUNIOR

BMS 300	Principles of Human Physiology	-	4
CHEM 245	Fundamentals of Organic Chemistry	-	4
ECE 303/STAT 303	Introduction to Communications Principles	-	3
<u>BIOM 300</u>	<u>Problem-Based Learning Biomedical Engr Lab</u>	-	<u>4</u>

<u>ECE 311</u>	Linear System Analysis I		3
<u>ECE 312</u>	<u>Linear System Analysis II</u>	-	<u>3</u>
<u>ECE 331</u>	<u>Electronics Principles I</u>	-	<u>4</u>
<u>ECE 332</u>	Electronics Principles II		4
<u>ECE 341</u>	Electromagnetic Fields and Devices I		3
<u>ECE 342</u>	Electromagnetic Fields and Devices II		3
<u>LIFE 210</u>	Introductory Eukaryotic Cell Biology		3
MECH 262	Engineering Mechanics	-	4
<u>Arts and Humanities</u>		<u>3B</u>	<u>3</u>
<u>Global and Cultural Awareness</u>		3E	3
Additional Requirements for Graduation ¹			0
Total Credits			33
SENIOR			
BIOM 300	Problem-Based Learning Biomedical Engr Lab	-	4
ECE 331	Electronics Principles I	-	4
ECE 332	Electronics Principles II	-	4
<u>BIOM 431/ECE 431</u>	<u>Biomedical Signal and Image Processing</u>	-	<u>3</u>
<u>BMS 300</u>	<u>Principles of Human Physiology</u>	-	<u>4</u>
<u>CHEM 245</u>	<u>Fundamentals of Organic Chemistry</u>	-	<u>4</u>
<u>ECE 251</u>	<u>Introduction to Microprocessors</u>	-	<u>4</u>
<u>ECON 202</u>	Principles of Microeconomics (GT-SS1)	3C	3
Arts and Humanities		3B	3
ECE Technical Electives²		-	9
<u>MECH 262</u>	<u>Engineering Mechanics</u>	-	<u>4</u>
<u>MECH 337</u>	<u>Thermodynamics</u>	-	<u>4</u>
<u>ECE Technical Electives (See list below)²</u>		-	<u>6</u>
Additional Requirements for Graduation ¹			0
Total Credits			<u>32</u>
FIFTH YEAR			
<u>BIOM 486A</u>	Biomedical Design Practicum: Capstone Design I	4A,4B,4C	4
<u>BIOM 486B</u>	Biomedical Design Practicum: Capstone Design II	4A,4B,4C	4
Select one from the following:			3
<u>CO 301B</u>	Writing in the Disciplines: Sciences (GT-CO3)	2	
<u>JTC 300</u>	Professional and Technical Communication (GT-CO3)	2	
<u>Arts and Humanities</u>		3B	3
<u>Historical Perspectives</u>		3D	3
BME Technical Electives (See list below)			6

ECE Technical Electives (See list below) ²	8
Additional Requirements for Graduation ¹	0
Total Credits	31
Program Total Credits:	157-158

BME Technical Electives:

Code	Title	Credits
<u>BC 351</u>	Principles of Biochemistry	4
<u>BC 401</u>	Comprehensive Biochemistry I	3
<u>BC 403</u>	Comprehensive Biochemistry II	3
<u>BC 404</u>	Comprehensive Biochemistry Laboratory	2
<u>BC 411</u>	Physical Biochemistry	4
<u>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 421</u>	Transport Phenomena in Biomedical Engineering	3
<u>BIOM 422</u>	Kinetics of Biomolecular and Cellular Systems	3
<u>BIOM 441</u>	Biomechanics and Biomaterials	3
<u>BIOM 470/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 495</u>	Independent Study	1-6
<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 570/MECH 570</u>	Bioengineering	3
<u>BIOM 573/MECH 573</u>	Structure and Function of Biomaterials	3
<u>BIOM 574/CBE 574</u>	<u>Bio-Inspired Surfaces</u>	<u>3</u>
<u>BIOM 576/CBE 576</u>	<u>Quantitative Systems Physiology</u>	<u>4</u>
<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
<u>BMS 420</u>	Cardiopulmonary Physiology	3

Code	Title	Credits
<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>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 330</u>	Process Simulation	3
<u>CHEM 334</u>	Quantitative Analysis Laboratory	1
<u>CHEM 335</u>	Introduction to Analytical Chemistry	3
<u>CHEM 343</u>	Modern Organic Chemistry II	3
<u>CHEM 344</u>	Modern Organic Chemistry Laboratory	2
<u>CHEM 346</u>	Organic Chemistry II	4
<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>	<u>Introduction to Radiation Biology</u>	<u>3</u>
<u>ERHS 502</u>	Fundamentals of Toxicology	3
<u>ERHS 510</u>	Cancer Biology	3
<u>HES 307</u>	Biomechanical Principles of Human Movement	4
<u>HES 319</u>	Neuromuscular Aspects of Human Movement	4
<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 432</u>	<u>Engineering of Nanomaterials</u>	<u>3</u>
<u>MECH 543</u>	Biofluid Mechanics	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

Code	Title	Credits
<u>MIP 352</u>	Medical Bacteriology Laboratory	3
<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/BMS 503</u>	Developmental Neurobiology	3
<u>NB 505/BMS 505</u>	Neuronal Circuits, Systems and Behavior	3

Electrical Engineering Technical Electives

Code	Title	Credits
<u>BIOM 570/MECH 570</u>	<u>Bioengineering</u>	<u>3</u>
<u>CS 314</u>	<u>Software Engineering</u>	<u>3</u>
<u>CS 320</u>	<u>Algorithms--Theory and Practice</u>	<u>3</u>
<u>CS 356</u>	<u>Systems Security</u>	<u>3</u>
<u>CS 370</u>	<u>Operating Systems</u>	<u>3</u>
<u>CS 410</u>	<u>Introduction to Computer Graphics</u>	<u>4</u>
<u>CS 414</u>	<u>Object-Oriented Design</u>	<u>4</u>
<u>CS 420</u>	<u>Introduction to Analysis of Algorithms</u>	<u>4</u>
<u>CS 430</u>	<u>Database Systems</u>	<u>4</u>
<u>CS 440</u>	<u>Introduction to Artificial Intelligence</u>	<u>4</u>
<u>CS 453</u>	<u>Introduction to Compiler Construction</u>	<u>4</u>
<u>CS 455</u>	<u>Introduction to Distributed Systems</u>	<u>4</u>
<u>CS 475</u>	<u>Parallel Programming</u>	<u>4</u>
<u>CS 510</u>	<u>Image Computation</u>	<u>4</u>
<u>CS 520</u>	<u>Analysis of Algorithms</u>	<u>4</u>
<u>CS 540</u>	<u>Artificial Intelligence</u>	<u>4</u>
<u>CS 545</u>	<u>Machine Learning</u>	<u>4</u>
<u>CS 556</u>	<u>Computer Security</u>	<u>4</u>
<u>ECE 4** - Any ECE Course at the 400-level</u>		<u>var.</u>
<u>Select any course from the following: ³</u>		
<u>ECE 495A</u>	<u>Independent Study</u>	
<u>ECE 495B</u>	<u>Independent Study: Open Option Project</u>	
<u>ECE 495C</u>	<u>Independent Study: Vertically Integrated Projects</u>	
<u>ECE 5** - Any ECE Course at the 500-level</u>		<u>var.</u>

<u>Code</u>	<u>Title</u>	<u>Credits</u>
<u>MATH 419</u>	<u>Introduction to Complex Variables</u>	<u>3</u>
<u>MATH 450</u>	<u>Introduction to Numerical Analysis I</u>	<u>3</u>
<u>MATH 451</u>	<u>Introduction to Numerical Analysis II</u>	<u>3</u>
<u>MATH 470</u>	<u>Euclidean and Non-Euclidean Geometry</u>	<u>3</u>
<u>MECH 570</u>	<u>Bioengineering</u>	<u>3</u>
<u>PH 315</u>	<u>Modern Physics Laboratory</u>	<u>2</u>
<u>PH 425</u>	<u>Advanced Physics Laboratory</u>	<u>2</u>
<u>PH 451</u>	<u>Introductory Quantum Mechanics I</u>	<u>3</u>
<u>PH 452</u>	<u>Introductory Quantum Mechanics II</u>	<u>3</u>
<u>PH 462</u>	<u>Statistical Physics</u>	<u>3</u>

- ¹ Students are required to participate in the Professional Learning Institute (PLI) program as a requirement for graduation. The program consists of eleven PLI workshops distributed by focus areas as follows: Global and Cultural Diversity (2 workshops), Innovation (2 workshops), Leadership (2 workshops), Civic and Public Engagement (2 workshops), and Ethics (3 workshops). Each workshop is between 1-2 hours long and no outside preparation is required to attend any of the workshops. Attendance at the required workshops may be spread over the student's five-year program.
- ² ~~Select a total of 14 credits from the Electrical Engineering Technical Elective List. Select a total of 17 credits from ECE 400 level or higher courses not otherwise required. 3 of the 17 credits must be from ECE courses dual listed with the BIOM subject code.~~
- ³ A maximum total of 3 credits of 495 Independent Study may be applied towards technical elective degree requirements.



College of Natural Sciences
 Department of Statistics
 Minor in Applied Statistics

Effective Spring 2017
[Link to CIM](#)

Reason for Request: We can no longer provide STAT 472 for minors due to resource constraints.

A minimum grade of C must be achieved in all statistics courses (STAT subject code and joint-listed) required for the minor in applied statistics.

Students in the **biological sciences** should take **STAT 307** from Group A. Students in the **social sciences** should take **STAT 311** from Group A. Students with a calculus background should take **STAT 315** from Group A. Everyone else should take **STAT 301**.

<u>Code</u>	<u>Title</u>	<u>Credits</u>
GROUP A (Select one):		3
<u>STAT 301</u>	Introduction to Statistical Methods	
<u>STAT 307</u>	Introduction to Biostatistics	
<u>STAT 311</u>	Statistics for Behavioral Sciences I	
<u>STAT 315</u>	Statistics for Engineers and Scientists	
GROUP B (Select one):		3
<u>STAT 305</u>	Sampling Techniques	
<u>STAT 312</u>	Statistics for Behavioral Sciences II	
GROUP C (Must take <u>BOTH</u> ALL courses):		6

Code	Title	Credits
<u>STAT 341</u>	Statistical Data Analysis I	
<u>STAT 342</u>	Statistical Data Analysis II	
Electives: choose nine <u>six</u> credits from the following, or permission of advisor: ¹		<u>96</u>
<u>ECE 311</u>	Linear System Analysis I	
<u>ECE 312</u>	Linear System Analysis II	
<u>ECON 335/AREC 335</u>	Introduction to Econometrics	
<u>ECON 435</u>	Economic Forecasting	
<u>F 321</u>	Forest Biometry	
<u>F 422</u>	Quantitative Methods in Forest Management	
<u>FW 370</u>	Design of Fish and Wildlife Projects	
<u>FW 471</u>	Wildlife Data Collection and Analysis	
<u>MATH 369</u>	Linear Algebra I	
<u>MATH 435</u>	Projects in Applied Mathematics	
<u>MATH 450</u>	Introduction to Numerical Analysis I	
<u>MATH 451</u>	Introduction to Numerical Analysis II	
<u>MECH 417</u>	Control Systems	
<u>MGT 301</u>	Supply Chain Management	
<u>MGT 475</u>	International Business Management	
<u>NR 421</u>	Natural Resources Sampling	
<u>NR 422</u>	GIS Applications in Natural Resource Management	
<u>PSY 317</u>	Social Psychology Laboratory	
<u>PSY 370</u>	Psychological Measurement and Testing	
<u>PSY 371</u>	Psychological Measurement and Testing Laboratory	
<u>STAT 358</u>	<u>Introduction to Statistical Computing in SAS</u>	
<u>STAT 400</u>	Statistical Computing	
<u>STAT 420</u>	Probability and Mathematical Statistics I	
<u>STAT 421</u>	Introduction to Stochastic Processes	
<u>STAT 430</u>	Probability and Mathematical Statistics II	
<u>STAT 440</u>	Bayesian Data Analysis	
<u>STAT 460</u>	Applied Multivariate Analysis	
<u>STAT 472</u>	Statistical Consulting	

Program Total Credits:**21**¹ Electives approved by the undergraduate advisor in statistics or the department chair.

University Curriculum Committee
 December 2, 2016
CONSENT AGENDA

Experimental Courses – 1st Offering

	Course Title	Effective Term
ART 580A1	Issues in Art Education and the Public	Summer 2017
BIOM 380A1	3D Printing Lab for Biomedical Engineering	Spring 2017
CS 581A3	Software Maintenance & Evolution	Spring 2017
ECON 280A1	Economic Data Analytics	Fall 2017
LSPA 381A1	Word Formation and Professional Terminology	Spring 2017
MATH 580A2	Topological Data Analysis	Spring 2017
PH 280A1	Laboratory Electronics	Fall 2017
PHIL 280A1	The Spiritual Dimension of Human Life	Spring 2017

Experimental Courses – 2nd Offering (For Informational Purposes Only)

	Course Title	Effective Term
ECE/BIOM 581A9	Biophotonics	Fall 2017
ECE/BIOM 581B1	Cells as Circuits	Fall 2017
ECE/BIOM 581B5	Electrochemical Sensors	Fall 2017
GR 381A2	Glaciology	Fall 2017

Minor Changes to Courses

	Course Title	Requested Change	Effective Term
ACT 321	Cost Management	Offering Term: F, <u>S</u>	Fall 2017
BIOM 486A	Biomedical Design Practicum: Capstone Design I	Prerequisite Courses: (BIOM 300) and (BIOM <u>421</u> 330 or BIOM <u>431</u> or BIOM 441). ECE 441 Registration Information: <u>Senior standing</u> . Enrollment in biomedical engineering major.	Fall 2017
<i>Existing AUCC 4A, 4B & 4C in Biomedical Engineering Dual Degree Programs</i>			
CHEM 246	Fundamentals of Organic Chemistry Laboratory	Contact Hours: 1(0- <u>2</u> -0)	Fall 2017
CHEM 338	Environmental Chemistry	Prerequisite Courses: CHEM 113 AND (CHEM 245 or CHEM 341 <u>or 345</u>).	Spring 2018
ESS 545	Applications in Greenhouse Gas Inventories	Prerequisite Courses: ESS 524; STAT <u>511A</u> , 511 .	Fall 2017

ESS 655	Multivariate Analysis for Community Ecology	Prerequisite Courses: STAT 511A 511 and (ECOL 500-679 or ESS 500-679 or FW 500-679 or BZ 500-679 - at least 3 credits)	Fall 2017
LARA 100	First-Year Arabic I	Course Number: 100 105	Fall 2017
		Registration Information: <u>Credit not allowed for both LARA 100 and LARA 105.</u>	
LARA 101	First-Year Arabic II	Course Number: 101 107	Fall 2017
		Prerequisite Courses: <u>LARA 101</u> or LARA 105.	
		Registration Information: <u>Credit not allowed for both LARA 101 and LARA 107.</u>	
LCHI 100	First-Year Chinese I	Course Number: 100 105	Fall 2017
		Registration Information: <u>Credit not allowed for both LCHI 100 and LCHI 105.</u>	
LCHI 101	First-Year Chinese II	Course Number: 101 107	Fall 2017
		Prerequisite Courses: <u>LCHI 100</u> or LCHI 105.	
		Registration Information: <u>Credit not allowed for both LCHI 101 and LCHI 107.</u>	
LFRE 100	First-Year French I	Registration Information: Must register for lecture and recitation. No previous study in French. <u>Placement exam required.</u> Credit allowed for only one of the following: LFRE 100, LFRE 105, or LFRE 106. Sections offered as Mixed Face-to-Face (3 credits face-to-face, 2 credits online) or Face-to-Face only .	Fall 2017
LGER 100	First-Year German I	Registration Information: Must register for lecture and recitation. No previous study in German. <u>Placement exam required.</u> Credit not allowed for both LGER 100 and LGER 105. Sections offered as Mixed Face-to-Face (3 credits face-to-face, 2 credits online) or Face-to-Face only .	Fall 2017
LITA 100	First-Year Italian I	Course Number: 100 105	Fall 2017
		Registration Information: No previous study in Italian. <u>Credit not allowed for both LITA 100 and LITA 105.</u>	
LITA 101	First-Year Italian II	Course Number: 101 107	Fall 2017
		Prerequisite Courses: <u>LITA 100</u> or LITA 105.	
		Registration Information: <u>Open to all levels. Credit not allowed for both LITA 101 and LITA 107.</u>	
LJPN 100	First-Year Japanese I	Course Number: 100 105	Fall 2017
		Registration Information: No previous study in Japanese. Sections may be offered: Online. <u>Credit not allowed for both LJPN 100 and LJPN 105.</u>	

LJPN 101	First-Year Japanese II	Course Number: 101 407	Fall 2017
		Prerequisite Courses: LJPN 100 or LJPN 105.	
		Registration Information: Open to all levels. Sections may be offered: Online. Credit not allowed for both LJPN 101 and LJPN 107.	
LLAT 100	First Year Latin I	Course Number: 100 405	Fall 2017
		Registration Information: Open to all levels. Credit not allowed for both LLAT 100 and LLAT 105.	
LLAT 101	First-Year Latin II	Course Number: 101 407	Fall 2017
		Prerequisite Courses: LLAT 100 or LLAT 105.	
		Registration Information: Open to all levels. Credit not allowed for both LLAT 101 and LLAT 107.	
LRUS 100	First-Year Russian I	Course Number: 100 405	Fall 2017
		Registration Information: No previous study in Russian. Credit not allowed for both LRUS 100 or LRUS 105.	
LRUS 101	First-Year Russian II	Course Number: 101 407	Fall 2017
		Prerequisite Courses: LRUS 100 or LRUS 105.	
		Registration Information: Open to all levels. Credit not allowed for both LRUS 101 and LRUS 107.	
LSGN 100	American Sign Language I	Course Number: 101 409	Fall 2017
		Registration Information: Open to all levels. Credit not allowed for both LSGN 100 and LSGN 109.	
LSGN 101	American Sign Language II	Course Number: 101 440	Fall 1017
		Offering Term: F , S, SS	
		Prerequisite Courses: LSGN 100 or LSGN 109.	
		Registration Information: Open to all levels. Credit not allowed for both LSGN 101 and LSGN 110.	
LSPA 100	First-Year Spanish I	Registration Information:	Fall 1017
		Must register for lecture and recitation. No previous study in Spanish. Placement exam required. Credit allowed for only one of the following: LSPA 100, LSPA 105, or LSPA 106. Sections offered as Mixed Face-to-Face (3 credits face-to-face, 2 credits online) or Face-to-Face only .	
MU 152	Piano Skills for Choral Directors	Prerequisite Courses: MU151A.	Fall 2017
		Offering Term: F , S	
MU 153	Piano Skills for Music Therapists	Offering Term: F , S	Fall 2017
MU 251	Voice Techniques	Offering Year: Odd Every	Fall 2017
		Offering Term: S F	

MU 332	History of Jazz	Offering Term: F S, SS	Fall 2017
MU 334	Music History I	Offering Term: F , S	Fall 2017
MU 335	Music History II	Offering Term: F , S	Fall 2017
		Prerequisite Courses: MU 118; or MU 131.	
MU 355	Choral Conduction and Literature	Offering Term: S F	Fall 2017
MU 466	Song Literature	Offering Year: Odd <u>Every</u>	Fall 2017
MU 467	Vocal Pedagogy	Offering Year: Odd <u>Every</u>	Fall 2017
		Offering Term: S F	
NRRT 520	Perspectives on Ski Area Management	Offering Term: F, S, SS	Fall 2017
NRRT 521	Sustainable Ski Area Management	Offering Term: F , S, SS	Fall 2017
		Prerequisite Courses: NRRT 520 <u>or concurrent registration.</u>	
NRRT 522	Ski Area Operations and Human Resources	Offering Term: F , S, SS	Fall 2017
		Prerequisite Courses: NRRT 520 <u>or concurrent registration.</u>	
NRRT 523	Strategic Ski Area Marketing and Management	Offering Term: F , S, SS	Fall 2017
		Prerequisite Courses: NRRT 520 <u>or concurrent registration.</u>	
NRRT 524	Ski Area Finance and Investment	Offering Term: F , S, SS	Fall 2017
		Prerequisite Courses: NRRT 520 <u>or concurrent registration.</u>	
NRRT 525	Ski Area Planning and Development	Offering Term: F , S, SS	Fall 2017
		Prerequisite Courses: NRRT 520 <u>or concurrent registration.</u>	
PSY 441	Industrial Psychology Laboratory	Offering Term: F , S, SS	Fall 2017
		Prerequisite Courses: PSY 250; concurrent registration in PSY 440; STAT 301 or STAT 311; <u>concurrent registration.</u>	
		Registration Information: Must have concurrent registration in PSY 440. Sections may be offered: Online.	
STAA 574	Methods in Multivariate Analysis	Prerequisite Courses: <u>STAA 551 or concurrent registration; STAA 561.</u> None.	Fall 2017
		Registration Information: Must have concurrent registration in STAA 551; must have concurrent registration in STAA 561. Written consent of instructor. This is a partial semester course.	

STAA 577	Statistical Learning and Data Mining	<p>Prerequisite Courses: STAA 551 or concurrent registration; STAA 561. None.</p> <p>Registration Information: Must have concurrent registration in STAA 551; must have concurrent registration in STAA 561. This is a partial semester course. Sections may be offered: Online.</p>	Fall 2017
STAT 341	Statistical Data Analysis I	<p>Prerequisite: STAT 158; (STAT 301 or STAT 307 or STAT 311 or STAT 315).</p>	Fall 2017

Course Drops

	Course Title	Requested Change	Effective Term
AM 370	Fashion Trend Analysis and Forecasting	Drop	Spring 2017
DM 518	Consumer Issues-Global Perspectives	Drop	Spring 2017
DM 578	Trends-Consumer Issues	Drop	Spring 2017

