

December 5, 2018
Consent Agenda

All changes are effective Fall 2019, unless otherwise noted.

Academic Affairs (*moved and seconded in committee*)

Proposals for change(s) in an undergraduate program:

1. Department of Physics and Engineering Science**a. change(s) to the Engineering Science, B.S.** (Form B – ID# 2031)

Proposed change(s): Other: In addition to replacing PHYS 212/212L with PHYS 213/213L in the Foundation: Add PHYS 214 and PHYS 214L as Foundation Courses, Remove PHYS 214/214 L, CSCI 130/131L, and GEOL 111/111L from Foundation (Science Options), Replace ENGR 398 with PHYS 250 in the Major Requirements, Reduce the number of Major Requirements (Science Electives) from 5 (15-20 credits) to 4 (12-16 credits), and Add ENGR 315 and ENGR 450 as Major Requirements (Science Electives) options.

Proposed catalog description:**Engineering Science, B.S.****Mission Statement**

The mission of the Engineering Science program is to train problem solvers who can integrate science and engineering principles. Engineering science is the study of the combined disciplines of engineering, the applied sciences, and mathematics. This combination of disciplines results in graduates that can bring a deep understanding of science and broad training in engineering design and practice together to solve new challenges. The focus of the program is on general problem solving combined with fundamental scientific and engineering skills and content knowledge, resulting in graduates having the ability to keep pace with the continuous innovations occurring with technology, and the multidisciplinary approach required for many emerging technical challenges. The program's faculty is committed to providing meaningful undergraduate experiences for both majors and non-majors through high-quality, student-centered teaching and undergraduate research/design mentoring. Students completing a degree in Engineering Science should be well prepared for either a general engineering career or graduate school in engineering, applied science, or a related discipline.

Student Learning Outcomes

After completing the program in Engineering Science, students will be able to:

1. Apply knowledge of mathematics, science, and engineering.
2. Design and conduct experiments, as well as to analyze and interpret data.
3. Design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. Function on multidisciplinary teams.
5. Identify, formulate, and solve engineering problems. Demonstrate professional and ethical responsibility.
6. Communicate effectively.
7. Understand the impact of engineering solutions in a global, economic, environmental, and societal context.
8. Engage in life-long learning.
9. Apply knowledge and skills to contemporary issues.
10. Use the techniques, skills, and modern engineering tools necessary for engineering practice.

The Engineering Science program at CCU focuses on the application of the applied sciences integrated with engineering principles to create technical solutions to problems. Through either a major or minor, students can easily merge their interest in engineering with other disciplines taught in the College of Science such as biology, chemistry, computer science, marine science, mathematics and/or physics. Engineering Science students can also pursue one of the dual-degree engineering programs with either Clemson University or Horry Georgetown Technical College.

All students pursuing a major in Engineering Science complete a foundation in mathematics and basic sciences, followed by more advanced courses in engineering and applied science. The major requirements focus on the following core academic competencies: (1) problem solving and communication, (2) epistemological methodologies, (3) design practice, and (4) technical practice. Students pursuing the minor in Engineering Science complete a basic curriculum in general engineering. Students must earn a grade of C or better in all Foundation and Major Requirement courses.

Degree Requirements (120 Credits)

Core Curriculum Requirements

Core Curriculum (38-40 Total Credit Hours)

Graduation Requirements

Graduation Requirements (3-7+ Credits) *

Foundation Courses (23 27-41 45 Credits) *

Complete the following courses:

- ENGR 101 - Introduction to Engineering (3 credits) *
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- PHYS 211 - Essentials of Physics I (3 credits) AND
- PHYS 211L - Essentials of Physics I Laboratory (1 credit)
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- ~~PHYS 212 - Essentials of Physics II (3 credits) AND~~
- ~~PHYS 212L - Essentials of Physics II Laboratory (1 credit)~~
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- ~~PHYS 213 - Fundamentals of Physics I (3 credits) AND~~
- ~~PHYS 231L - Fundamentals of Physics I Laboratory (1 credit)~~
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- ~~PHYS 214 - Fundamentals of Physics II (3 credits) AND~~
- ~~PHYS 214L - Fundamentals of Physics II Laboratory (1 credit)~~
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- CHEM 111 - General Chemistry I (3 credits) * AND
- CHEM 111L - General Chemistry Laboratory I (1 credit) *
-
- MATH 160 - Calculus I (4 credits) *
- MATH 161 - Calculus II (4 credits)
- MATH 260 - Calculus III (4 credits)
- MATH 320 - Elementary Differential Equations (3 credits)
- PHIL 102 - Introduction to Ethics (3 credits) *

Choose one from the following: (3-4 Credits)

- MATH 174 - Introduction to Discrete Mathematics (3 credits)
-
- MATH 242 - Modeling for Scientists I (3 credits) AND
- MATH 242L - Modeling for Scientists I Laboratory (1 credit)
-
- MATH 344 - Linear Algebra (3 credits)
-
- STAT 201 - Elementary Statistics (3 credits) * AND
- STAT 201L - Elementary Statistics Computer Laboratory (1 credit) *

Choose one from the following (4 Credits)

- ~~PHYS 214 - Fundamentals of Physics II (3 credits) AND~~
- ~~PHYS 214L - Fundamentals of Physics II Laboratory (1 credit)~~

- [CSCI 130 – Introduction to Computer Science \(3 credits\) AND](#)
- [CSCI 131L – Algorithmic Thinking \(1 credit\)](#)
-
- [CHEM 112 - General Chemistry II \(3 credits\) AND](#)
- [CHEM 112L - General Chemistry Laboratory II \(1 credit\)](#)
-
- [MSCI 111 - Introduction to Marine Science \(3 credits\) * AND](#)
- [MSCI 111L – Introduction to Marine Science Laboratory \(1 credit\) *](#)
-
- [BIOL 121 - Biological Science I \(3 credits\) * AND](#)
- [BIOL 121L - Biological Science I Laboratory \(1 credit\) *](#)
-
- [GEOL 111 – Physical Geology \(3 credits\) * AND](#)
- [GEOL 111L – Physical Geology Laboratory \(1 credit\) *](#)

Note:

* Course credit hours only count once toward the total university graduation credit hour requirements. Click on [Credit Sharing](#) for more information.

Major Requirements (~~43~~ 45-48 50)

Complete the following courses:

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- [ENGR 201 - Engineering Problem Solving \(3 credits\)](#)
 - [ENGR 202 - Engineering Graphics \(3 credits\)](#)
 - [ENGR 234 - Statics \(3 credits\)](#)
 - [ENGR 235 - Electric Circuits \(3 credits\)](#)
 - [PHYS 250 – Communication in STEM \(3 credits\)](#)
 - [PHYS 310 - Mathematical Methods in Physics \(3 credits\)](#)
 - [PHYS 351 - Computational Methods in Physics \(3 credits\)](#)
 - [PHYS 352 - Experimental Methods in Physics \(3 credits\)](#)
 - [ENGR 398 – Project Management and Communication \(1 credit\)](#)
 - [ENGR 399 Q* - Integrated Science and Design \(1 to 3 credits\) \(3 credits required\)](#)
 - [ENGR 499 Q - Senior Design \(3 credits\)](#)

Choose ~~five~~ four from the following: (~~15~~ 12-20 16 Credits)

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- [ENGR 315 – Electric Power and Renewable Energy \(3 credits\)](#)
 - [ENGR 321 - Electronics \(3 credits\)](#)
 - [ENGR 430 - Fluid Mechanics \(3 credits\)](#)
 - [ENGR 450 – Radiation Detection and Measurement \(3 credits\)](#)

- PHYS 301 - Analytical Mechanics (3 credits)
- PHYS 302 - Electricity and Magnetism (3 credits)
- PHYS 303 - Quantum Mechanics (3 credits)
- PHYS 341 - Thermodynamics and Statistical Mechanics (3 credits)
- CSCI 210 - Computer Organization and Programming (3 credits)
- CSCI 310 - Introduction to Computer Architecture (3 credits)
- CSCI 330 - Systems Analysis & Software Engineering (3 credits)
- CSCI 473 - Introduction to Parallel Systems (3 credits)
- CSCI 485 - Introduction to Robotics (3 credits)
- Other 300 level or above Science or Engineering courses with prior approval from the department (3-4 Credits)

Electives (0-20 Credits)

Total Credits Required: 120

Academic Affairs (*moved and seconded in committee*)

Proposals for new undergraduate program:

COLLEGE OF SCIENCE

1. Department of Mathematics and Statistics

a. Applied Statistics, B.S. (Form D – ID# 2023)

The Bachelor of Science in Applied Statistics seeks to provide students with a solid foundation in all aspects of statistical analysis; including programming, data analysis, and oral and written communication skills. This degree program is designed to attract students who wish to use logic, reasoning, and analytic skills in conjunction with statistical knowledge to pursue jobs as statisticians, data analysts and data scientists.

Students must earn a grade of ‘C’ or better in all major and cognate courses, including MATH 160 – Calculus I (4 credits), MATH 161 – Calculus II (4 credits), and STAT 201/STAT 201L – Elementary Statistics/Laboratory (4 credits).

Student Learning Outcomes

Graduates of the Applied Statistics program will be able to:

1. Use statistical reasoning to formulate a problem in statistical terms and perform exploratory analysis of data.
2. Critically evaluate the strengths and weaknesses of study designs and select a study design that is appropriate for addressing a specific research question.

3. Analyze data by appropriately fitting, assessing, and interpreting a variety of statistical models.
4. Demonstrate the ability to communicate the results of statistical analysis to both technical and non-technical audiences.

Degree Requirements

Core Curriculum Requirements

Core Curriculum (38-40 Total Credit Hours)

Graduation Requirements

Graduation Requirements (3-7+ Credits)*

Foundation Courses (14 – 18 Credits)

Complete the following courses:

- MATH 160 – Calculus I* (4 credits)
- MATH 161 – Calculus II (4 credits)
- STAT 201 – Elementary Statistics* (3 credits) AND
- STAT 201L – Elementary Statistics Laboratory* (1 credit)

Choose two additional courses:

- Two science courses from either BIOL, CHEM, GEOL, MSCI, or PHYS with course numbers greater than 109

Note:

* Course credit hours only count once toward the total university graduation credit hour requirements. Click on [Credit Sharing](#) for more information.

Major Requirements (52 Credits)

Complete the following courses:

- CSCI 135 – Introduction to Programming (3 credits)
- CSCI 225 – Introduction to Relational Databases and SQL (3 credits)
- MATH 260 – Calculus III (4 credits)
- MATH 344 – Linear Algebra (3 credits)
- STAT 316 – Experimental Design I (3 credits)
- STAT 318 – Applied Statistical Methods (3 credits)
- STAT 320 – Experimental Design II (3 credits)
- STAT 321 – SAS Basics (3 credits)
- STAT 412 – Statistical Inference I (3 credits)
- STAT 413 – Statistical Inference II (3 credits)
- MATH 490 – Seminar in Mathematics (3 credits)

Choose two courses from the following:

- STAT 414 – Time Series Analysis (3 credits)
- STAT 415 – Introduction to Bayesian Statistics (3 credits)
- STAT 420 – Statistical Computing (3 credits)

Choose four courses from the following:

- STAT courses numbered 300 or above

Cognate Requirements (9 Credits)

Applied statistics majors will select an interdisciplinary cognate of upper level courses numbered 300 or above with the approval of their faculty adviser. A grade of ‘C’ or better is required in each course to be applied toward the cognate. A minor will fulfill this requirement.

Electives (0 – 19 Credits)

Total Credits Required: 120

Academic Affairs (*moved and seconded in committee*)

Proposals for new undergraduate courses:

COLLEGE OF HUMANITIES & FINE ARTS

1. Department of Philosophy and Religious Studies

a. PHIL 350 – Ethics of Sexuality and Gender (Form C – ID# 1962)

Proposed catalog description: PHIL 350 - Ethics of Gender and Sexuality (3 credits).

This course introduces students to the ethical issues involved in human sexual activity and expression, including: the purpose of sexual activity, intimacy, and sexual consent; the relationship between love, sex, and marriage; the distinctions between sex and gender, the gender binary, and transgender identity. Issues to be examined include sexual assault and rape; pornography and sex work; same-sex relationships; polygamy, polyamory and “deviant” sexual behavior; the state’s role in regulating sexual and familial relationships; cybersex and cyberlove, etc. The overarching goal is for students to develop the skills necessary for thinking, writing, and speaking about sexual ethics. F, S, Su.

Course Prefix/Number: PHIL 350

Course Title: Ethics of Sexuality and Gender

Primary Goal: This course may be taken as a cognate or an elective.

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): None

Corequisite(s): None
Number of credits: 3 credits
Cross-listing(s): None
Course Restriction(s): None
Estimated enrollment: 20-25
Prior enrollment in course: 23
Method of delivery: Classroom
Semester(s) offered: Fall, Spring, Summer
Considered for the Core Curriculum: No
Considered for the QEP: No

b. RELG 300 – Religion in Public Life (Form C – ID# 1963)

Proposed catalog description: RELG 300 - Religion in Public Life (3 credits). This course explores the role that religion plays in public life in a variety of contexts, including the United States of America from the eighteenth century to the present. Students explore multiple perspectives on the relationship between religion and government, including ideas of secularism, state religions, and theocracy. Topics covered may also include debates over prayer in public schools, creationism (e.g. the Scopes trial), the 1979 Iranian revolution, and Scientology's legal battle with the Internal Revenue Service over tax-exempt status. F.

Course Prefix/Number: RELG 300

Course Title: Religion in Public Life

Primary Goal: This course is required for a major; this course may be taken as a cognate or an elective.

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): None

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None

Estimated enrollment: 25

Prior enrollment in course: 0

Method of delivery: Classroom

Semester(s) offered: Fall

Considered for the Core Curriculum: No

Considered for the QEP: No

c. RELG 315 – Archaeology and the Bible (Form C – ID# 1964)

Proposed catalog description: RELG 315 - Archaeology and the Bible (3 credits). This course introduces students to the field of archaeology and how material remains

contribute to the socio-scientific study of the Bible (Hebrew Bible/“Old Testament” and New Testament). Students learn about the major theories and methods of archaeology, how material remains illuminate biblical narratives, as well as the history of early Jewish and Christian traditions. Students also analyze the different ways individuals and groups today make use of archaeology associated with the Bible. S.

Course Prefix/Number: RELG 315

Course Title: Archaeology and the Bible

Primary Goal: This course may be taken as a cognate or an elective.

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): None

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None

Estimated enrollment: 25

Prior enrollment in course: 25

Method of delivery: Classroom

Semester(s) offered: Spring

Considered for the Core Curriculum: No

Considered for the QEP: No

d. RELG 353 – Reading Buddhist Texts (Form C – ID# 1965)

Proposed catalog description: RELG 353 - Reading Buddhist Texts (3 credits).

(Prereq: RELG 103 or RELG 104 or RELG 320 or RELG 326 or RELG 350 or RELG 352) This course explores seven classic texts considered primary sources in the Mahayana Buddhist canon. Students pursue academic literary analysis of these texts, explore their historical formulation as cohesive texts and examine their cultural impact. All readings are in English. S.

Course Prefix/Number: RELG 353

Course Title: Reading Buddhist Texts

Primary Goal: This course may be taken as a cognate or an elective.

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): RELG 103 or RELG 104 or RELG 320 or RELG 326 or RELG 350 or RELG 352

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): Prerequisites

Estimated enrollment: 20

Prior enrollment in course: 0

Method of delivery: Classroom
Semester(s) offered: Spring
Considered for the Core Curriculum: No
Considered for the QEP: No

e. **RELG 490 – Capstone Seminar** (Form C – ID# 1968)

Proposed catalog description: RELG 490 - Capstone Seminar (3 credits). (Prereq: Senior standing) This seminar engages religious studies majors in research and discussion involving an advanced topic in religious studies. The final paper demonstrates research skills, analysis, and original argument, and should be suitable for submission to an undergraduate conference or journal. Students present their final papers to the department faculty at the completion of the course. F.

Course Prefix/Number: RELG 490
Course Title: Capstone Seminar
Primary Goal: This course is required for a major
Repeatable for Credit: No
Course Equivalencies: No
Pass/Fail Grading: No
Prerequisite(s): Senior standing
Corequisite(s): None
Number of credits: 3 credits
Cross-listing(s): None
Course Restriction(s): Senior standing
Estimated enrollment: 10
Prior enrollment in course: 0
Method of delivery: Classroom
Semester(s) offered: Fall
Considered for the Core Curriculum: No
Considered for the QEP: No

f. **RELG 499 – Senior Thesis** (Form C – ID# 1969)

Proposed catalog description: RELG 499 Senior Thesis (3 credits). (Prereq: Senior standing) Students plan, execute, and write an original paper in religious studies under the direction of a thesis adviser. The thesis reflects a mastery of writing skills, research skills, and content knowledge, and should be suitable for submission to an undergraduate conference or journal. The student presents the thesis to the department faculty at the completion of the course. F, S.

Course Prefix/Number: RELG 499
Course Title: Senior Thesis
Primary Goal: This course is required for a major
Repeatable for Credit: No

Course Equivalencies: No
Pass/Fail Grading: No
Prerequisite(s): Senior standing
Corequisite(s): None
Number of credits: 3 credits
Cross-listing(s): None
Course Restriction(s): Senior standing
Estimated enrollment: 5
Prior enrollment in course: 0
Method of delivery: Classroom
Semester(s) offered: Fall, Spring
Considered for the Core Curriculum: No
Considered for the QEP: No

- g. **HIST 306 – The French Revolution** (Form C – ID# 1985)
Proposed catalog description: HIST 306 - The French Revolution (3 credits). A critical examination of the French Revolution’s origins, development and immediate consequences. F, W, S, Su.

Course Prefix/Number: HIST 306
Course Title: The French Revolution
Primary Goal: This course may be taken as a cognate or an elective.
Repeatable for Credit: No
Course Equivalencies: No
Pass/Fail Grading: No
Prerequisite(s): None
Corequisite(s): None
Number of credits: 3 credits
Cross-listing(s): None
Course Restriction(s): None
Estimated enrollment: 22
Prior enrollment in course: 22
Method of delivery: Hybrid
Semester(s) offered: Fall, Winter, Spring, Summer
Considered for the Core Curriculum: No
Considered for the QEP: No

- h. **PHIL 103 – Introduction to Political Philosophy** (Form C – ID# 2030)
Proposed catalog description: PHIL 103 - Introduction to Political Philosophy (3 credits). This course surveys broad trends in political thought: liberalism, conservatism, libertarianism, communism and more are possibly covered. Specific political thinkers from the ancient world through today may be considered. Crucial political concepts such as justice, liberty and equality may also be considered. The overarching goal is to critically explore how humanity has attempted to organize social and political life, all

with an eye toward the understanding and evaluation of politics today. No background in philosophy is required. F, S.

Course Prefix/Number: PHIL 103

Course Title: Introduction to Political Philosophy

Primary Goal: This course may be taken as an elective

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): None

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None

Estimated enrollment: 25

Prior enrollment in course: 0

Method of delivery: Classroom

Semester(s) offered: Fall, Spring

Considered for the Core Curriculum: Yes

Considered for the QEP: No

COLLEGE OF SCIENCE

1. Department of Computing Science

a. CSCI 435 – Anti-Forensics and Digital Privacy (Form C – ID# 1769)

Proposed catalog description: CSCI 435 - Anti-Forensics and Digital Privacy (3 credits). (Prereq: Junior standing) This course complements CSCI 434 – Digital Forensics by focusing on techniques to reduce the amount of information collected and stored by computer systems, with an emphasis on protecting the system and user from fraud and identity theft resulting from a compromised or stolen system. Concepts related to privacy in the digital world are discussed. Vulnerabilities in digital devices are explored in the context of a dystopian society in which citizens are under perpetual surveillance. S.

Course Prefix/Number: CSCI 435

Course Title: Anti-Forensics and Digital Privacy

Primary Goal: This course may be taken as an elective

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): Junior standing

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None
Estimated enrollment: 20
Prior enrollment in course: 0
Method of delivery: Hybrid
Semester(s) offered: Spring
Considered for the Core Curriculum: No
Considered for the QEP: No

2. Department of Mathematics and Statistics

a. **MATH 444 – Advanced Linear Algebra** (Form C – ID# 1998)

Proposed catalog description: MATH 444 - Advanced Linear Algebra (3 credits). (Prereq: A grade of 'C' or better in MATH 344) This course covers many of the central concepts in linear algebra including fields, vector spaces, linear transformations and bases. In this course, focus is on theory and abstraction. In particular, emphasis is placed on linear transformations in place of matrix operations. Offered as needed.

Course Prefix/Number: MATH 444

Course Title: Advanced Linear Algebra

Primary Goal: This course may be taken as an elective

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): A grade of 'C' or better in MATH 344

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None

Estimated enrollment: 6

Prior enrollment in course: 6

Method of delivery: Classroom

Semester(s) offered: Offered as needed

Considered for the Core Curriculum: No

Considered for the QEP: No

b. **STAT 415 – Introduction to Bayesian Statistics** (Form C – ID # 2019)

Proposed catalog description: STAT 415 - Introduction to Bayesian Statistics (3 credits). (Prereq: A grade of 'C' or better in STAT 412) This course presents an in-depth introduction to the Bayesian paradigm. A study of Bayes' Rule introduces students to likelihood functions, posterior and prior distributions. Bayesian inference including proportions, means and regression are explored in comparison to the frequentist approach. Extensive use of software. S, even years.

Course Prefix/Number: STAT 415

Course Title: Introduction to Bayesian Studies
Primary Goal: This course may be taken as an elective
Repeatable for Credit: No
Course Equivalencies: No
Pass/Fail Grading: No
Prerequisite(s): A grade of 'C' or better in STAT 412
Corequisite(s): None
Number of credits: 3 credits
Cross-listing(s): None
Course Restriction(s): None
Estimated enrollment: 20
Prior enrollment in course: 0
Method of delivery: Classroom
Semester(s) offered: Spring, even years
Considered for the Core Curriculum: No
Considered for the QEP: No

c. **STAT 414 – Time Series Analysis** (Form C – ID # 2020)

Proposed catalog description: STAT 414 - Time Series Analysis (3 credits). (Prereq: A grade of 'C' or better in STAT 412) This course is an introduction to models and graphical analyses for data, which are generated sequentially. Topics include basic models (white noise, AR, random walks), time series regression and forecasting. Extensive use of software. F, even years.

Course Prefix/Number: STAT 414
Course Title: Time Series Analysis
Primary Goal: This course may be taken as an elective
Repeatable for Credit: No
Course Equivalencies: No
Pass/Fail Grading: No
Prerequisite(s): A grade of 'C' or better in STAT 412
Corequisite(s): None
Number of credits: 3 credits
Cross-listing(s): None
Course Restriction(s): None
Estimated enrollment: 20
Prior enrollment in course: 0
Method of delivery: Classroom
Semester(s) offered: Fall, even years
Considered for the Core Curriculum: No
Considered for the QEP: No

d. **STAT 323 – Sampling Design and Analysis** (Form C – ID # 2024)

Proposed catalog description: STAT 323 - Sampling Designs and Analysis (3 credits). (Prereq: A grade of 'C' or better in STAT 201) This course highlights important areas of

survey design and analysis. Design of the survey instrument and its distribution are covered. The impacts of nonresponse and other types of bias are discussed. Tools are given for summarizing and conducting inference on some of the most common designs including stratified and cluster sampling. Extensive use of software. S, odd years.

Course Prefix/Number: STAT 323

Course Title: Sampling Design and Analysis

Primary Goal: This course may be taken as an elective

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): A grade of 'C' or better in STAT 201

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None

Estimated enrollment: 20

Prior enrollment in course: 0

Method of delivery: Classroom

Semester(s) offered: Spring, odd years

Considered for the Core Curriculum: No

Considered for the QEP: No

3. Department of Physics and Engineering Science

a. PHYS 450 – Radiation Detection and Measurement (Form C – ID # 1645)

Proposed catalog description: PHYS 450- Radiation Detection and Measurement (3 credits). (Prereq: PHYS 212 or PHYS 214 and permission of the instructor) A course in the fundamentals of radiation detection and measurement covering topics including nuclear instability, radioactive sources, interaction of radiation with matter, processing of radiation-induced signals, biological effects of radiation, dosimetry, attenuation of charged particles, gamma rays and neutrons and effectiveness of shielding methods. S.

Course Prefix/Number: PHYS 450

Course Title: Radiation and Detection and Measurement

Primary Goal: This course may be taken as an elective

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): PHYS 212 or PHYS 214 and permission of the instructor

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): ENGR 450

Course Restriction(s): None

Estimated enrollment: 10

Prior enrollment in course: 0
Method of delivery: Classroom
Semester(s) offered: Spring
Considered for the Core Curriculum: No
Considered for the QEP: No

b. PHYS 450L – Radiation Detection and Measurement Laboratory (Form C – ID # 1649)

Proposed catalog description: PHYS 450L - Radiation Detection and Measurement Laboratory (1 credit) (Prereq: PHYS 450 and permission of instructor) A laboratory course demonstrating the fundamentals of radiation detection, radioactive sources, interaction of radiation with matter, processing of radiation-induced signals, dosimetry, spectroscopy and attenuation of charged particles, gamma rays and neutrons and effectiveness of shielding methods. Su.

Course Prefix/Number: PHYS 450L
Course Title: Radiation and Detection and Measurement Laboratory
Primary Goal: This course may be taken as an elective
Repeatable for Credit: No
Course Equivalencies: No
Pass/Fail Grading: No
Prerequisite(s): PHYS 450 and permission of instructor
Corequisite(s): None
Number of credits: 1 credit
Cross-listing(s): ENGR 450L
Course Restriction(s): None
Estimated enrollment: 10
Prior enrollment in course: 0
Method of delivery: Laboratory
Semester(s) offered: Summer

c. ENGR 450 – Radiation Detection and Measurement (Form C – ID # 1650)

Proposed catalog description: ENGR 450 - Radiation Detection and Measurement (3 credits). (Prereq: PHYS 212 or PHYS 214 and permission of instructor) A course in the fundamentals of radiation detection and measurement covering topics including nuclear instability, radioactive sources, interaction of radiation with matter, processing of radiation-induced signals, biological effects of radiation, dosimetry, attenuation of charged particles, gamma rays and neutrons and effectiveness of shielding methods. S.

Course Prefix/Number: ENGR 450
Course Title: Radiation and Detection and Measurement
Primary Goal: This course may be taken as an elective
Repeatable for Credit: No
Course Equivalencies: No
Pass/Fail Grading: No

Prerequisite(s): PHYS 212 or PHYS 214 and permission of instructor
Corequisite(s): None
Number of credits: 3 credits
Cross-listing(s): PHYS 450
Course Restriction(s): None
Estimated enrollment: 10
Prior enrollment in course: 0
Method of delivery: Classroom
Semester(s) offered: Spring

d. ENGR 450L – Radiation Detection and Measurement Laboratory (Form C – ID # 1651)

Proposed catalog description: ENGR 450L - Radiation Detection and Measurement Laboratory (1 credit). (Prereq: ENGR 450 and permission of the instructor) A laboratory course demonstrating the fundamentals of radiation detection, radioactive sources, interaction of radiation with matter, processing of radiation-induced signals, dosimetry, spectroscopy and attenuation of charged particles, gamma rays and neutrons and effectiveness of shielding methods. Su.

Course Prefix/Number: ENGR 450L

Course Title: Radiation and Detection and Measurement Laboratory

Primary Goal: This course may be taken as an elective

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): ENGR 450 and permission of instructor

Corequisite(s): None

Number of credits: 1 credit

Cross-listing(s): PHYS 450L

Course Restriction(s): None

Estimated enrollment: 10

Prior enrollment in course: 0

Method of delivery: Laboratory

Semester(s) offered: Summer

HTC HONORS COLLEGE AND CENTER FOR INTERDISCIPLINARY STUDIES

1. Department of Women's and Gender Studies

a. WGST 401 – Feminist Theories (Form C – ID # 1918)

Proposed catalog description: WGST 401 - Feminist Theories (3 credits). Theory provides us with the tools for interpreting and critiquing events, arguments and beliefs; when we read theory, we are forced to consider the world around us in a new way. The goal of this course is not only to critically examine the great variety of feminist theories, but also to encourage students to theorize their own understanding of the world. This

course is organized around a careful investigation (and often interrogation) of key debates within Women's and Gender Studies. Central to this course is the idea that understanding the world and understanding significant categories such as race, class, gender, sexuality, and nationality are interpretive, theoretical, and political acts. F,S

Course Prefix/Number: WGST 401

Course Title: Feminist Theories

Primary Goal: This course may be taken as an elective or a cognate

Repeatable for Credit: No

Course Equivalencies: No

Pass/Fail Grading: No

Prerequisite(s): None

Corequisite(s): None

Number of credits: 3 credits

Cross-listing(s): None

Course Restriction(s): None

Estimated enrollment: 20

Prior enrollment in course: 0

Method of delivery: Classroom

Semester(s) offered: Fall, Spring

Academic Affairs (*moved and seconded in committee*)

Proposals for change(s) in, restoration of, or removal of undergraduate courses:

COLLEGE OF HUMANITIES & FINE ARTS

1. **Department of Politics**

a. **POLI 444 Q – Moot Court**

Proposed revision(s): course change. (Form A – ID# 2018)

Course Action(s): Change to term(s) offered: **FROM:** Fall **TO:** Fall, Spring, Summer;

Change prerequisite(s): **FROM:** permission of instructor **TO:** none.

Proposed catalog description:

POLI 444 Q - Moot Court (1 credit). This course is an experiential approach to understanding the appellate court process. Students develop their understanding of the judicial process and learn about important legal principles by forming two-person teams and developing and arguing a fictional appellate case. Students are required to argue their cases at invitational and regional elimination tournaments sponsored by the American Collegiate Moot Court Association. F,S,Su.

COLLEGE OF SCIENCE

1. Department of Mathematics and Statistics

a. **MATH 139 – Basics of Contemporary Mathematics**

Proposed revision(s): course change. (Form A – ID# 1921)

Course Action(s): Change prerequisite(s): **FROM:** MATH 129L with a passing grade or by Mathematics Placement **TO:** by Mathematics Placement

Proposed catalog description:

MATH 139 – Basics of Contemporary Mathematics (4 credits). (Prereq: by Mathematics Placement) This course is designed for students not intending to take an advanced course in mathematics. Selected topics include set theory, logic, statistics, probability, and consumer mathematics, with emphasis on critical thinking and problem solving. F, S, Su.

b. **MATH 160 – Calculus I**

Proposed revision(s): course change. (Form A – ID # 1937)

Course Action(s): Change prerequisite(s): **FROM:** MATH 130 or MATH 130I and a grade of ‘C’ or better in MATH 131, or a grade of ‘C’ or better in MATH 135, or by Mathematics Placement **TO:** A grade of ‘C’ or better in either MATH 131 or MATH 135, or by Mathematics Placement

Proposed catalog description:

MATH 160 – Calculus I (4 credits) (Prereq: A grade of ‘C’ or better in MATH 131 or MATH 135, or by Mathematics Placement) Limits, continuity, differentiation and integration of algebraic and transcendental functions, applications of the derivative to curve sketching, optimization and related rates. F, S, Su.

c. **MATH 129L – Introduction to College Algebra Laboratory**

Proposed revision(s): course change. (Form A – ID # 1938)

Course Action(s): Remove course from catalog

MATH 129L has not been offered in several years and there is no plan to offer it again.

2. Department of Health Sciences

a. **PUBH 403 – Leadership in the Health Professions**

Proposed revision(s): course change. (Form A – ID # 2029)

Course Action(s): Change prerequisite(s): **FROM:** Junior standing **TO:** None

Proposed catalog description:

PUBH 403 - Leadership in the Health Professions (3 credits). To introduce students to leadership theories and research, provide a context for leadership in public health, and help students learn core leadership skills. Assessments will focus on helping students understand their own and others’ leadership styles. Content areas will include leadership theory; personal leadership; leadership in organizations; leadership in communities and leadership in research. Emphasis will be placed on the application of the course material

to real life public health problems and issues in the development of public health careers.
F,S.

Graduate Council (*moved and seconded in committee*)

Proposal(s) for change(s) in graduate programs:

COLLEGE OF SCIENCE

1. Department of Coastal Marine and Systems Science

a. change(s) to the Master of Science in Coastal Marine and Wetland Studies (Form B – ID# 65)

Proposed changes: Required Courses: **FROM:** CMSS 600 **TO:** CMWS 500

Proposed catalog description:

MASTER OF SCIENCE IN COASTAL MARINE AND WETLAND STUDIES (M.S)

Degree Requirements

The Master of Science in Coastal Marine and Wetland Studies requires:

Successful completion of an approved program of study with a minimum of 30 graduate hours including a thesis, or 36 graduate hours of coursework including CMSS 600 and CMSS 617 ;

Admission to Candidacy;

A minimum grade point average of 3.0 (B) on all course work;

Completion, presentation, and successful defense of a thesis; or, completion of 36 hours of coursework including ~~CMSS 600~~ **CMWS 500** and CMSS 617; and

All work applied toward the degree must be earned in the six years immediately preceding the completion of the graduate program.

Note: Transfer credit(s) cannot be used to raise the GPA at CCU.

Thesis Option

Students choosing the thesis option based on original research must assemble a thesis committee of at least three (3) members by the second semester of enrollment. The committee will consist of at least three (3) full-time CCU faculty members including the major professor who will chair the committee. An approved member from an outside institution may be included. The entire thesis committee will meet with the student semi-annually to assess progress and to give advice. Before graduation, students will submit the completed thesis to the CMWS coordinator who will schedule the public defense.

Non-Thesis Option

Students interested in future employment as professionals in the environmental field with federal, state, local agencies, not-for-profit organizations or private businesses may choose a non-thesis option. Completing a hands-on experiential component is strongly encouraged. Students who select a non-thesis option may complete an internship (CMWS 701, total of 6 credits) with a sponsoring public, non-profit or private laboratory, agency, or business. The internship must be approved by the CMWS coordinator and the outside supervisor, and should be related to the student's educational and career goals. The details of the work should be described and filed with the CMWS coordinator before beginning the internship. Although the faculty will provide guidance to students, it is the responsibility of each student to seek and secure an internship. Alternatively, students may seek to include up to six credits of special topic courses in which they can complete small projects.

Enrollment Requirement

Students in the Coastal Marine and Wetlands Studies program must be continuously enrolled during all phases of graduate work. This includes Fall, Spring, and Summer terms. (The Summer term here is inclusive of Maymester, Summer I, and Summer 2) This requirement is typically satisfied by registering for a minimum of one graduate credit in each term. However, the situation may arise where students have completed all course requirements except for the thesis or internship. In this case, students must enroll in CMWS 702 in order to satisfy the continuous enrollment requirement. Registering in CMWS 702 maintains email and library privileges and also allows access to University facilities and faculty advisers. CMWS 702 does not count toward degree requirements and does not substitute for the 6 credit hour requirement in CMWS 700 or for the 6 credit hour requirement in CMWS 701.

Thesis Option Degree Requirements (30 Graduate Credit Hours)

The Master of Science in Coastal Marine and Wetland Studies thesis option requires the successful completion of an approved program of study with a minimum of 30 graduate credit hours. Within the approved program are three core courses, one seminar course, 12 credit hours of electives, and a required thesis.

Core Courses (9 Credit Hours)

CMWS 601 - Coastal Marine and Wetland Processes (3 credits)

CMWS 602 - Coastal Marine and Wetland Ecology (3 credits)

CMWS 603 - Coastal and Wetland Policy and Management (3 credits)

Graduate Seminar Course (3 Credit Hours)

CMSS 609 - Coastal and Marine System Science, Issues and Applications Seminar (1 credit)

Electives (12 Credit Hours)

(Choose 12 credit hours)

Electives must be 500 level or above courses from BIOL, CHEM, CMSS, CMWS (with the exception of CMWS 701), MATH, MSCI, PHYS, or STAT or other approved graduate course.

A maximum of 6 credit hours at the 500 level may be used towards completing degree requirements.

Thesis Research (6 Credit Hours)

CMWS 700 - Thesis Research (1 to 6 credits)

Non-Thesis Option Degree Requirements (36 Graduate Credit Hours)

The Master of Science in Coastal Marine and Wetland Studies non-thesis option requires the successful completion of an approved program of study with a minimum of 36 graduate credit hours. Within the approved program are five core courses, one seminar course, 18 credit hours of electives, and optional experiential component (internship, cooperative work experience, or project).

Core Courses (15 Credit Hours)

CMWS 601 - Coastal Marine and Wetland Processes (3 credits)

CMWS 602 - Coastal Marine and Wetland Ecology (3 credits)

CMWS 603 - Coastal and Wetland Policy and Management (3 credits)

~~CMSS 600 - Mathematical Techniques in Systems Science (3 credits)~~

CMWS 500 - Essential Quantitative Skills for Coastal Marine Sciences (3 credits)

CMSS 617 - Effective Scientific Communications: Preparing for Life as a Scientist (1-3 credits)

Graduate Seminar Course (3 Credit Hours)

CMSS 609 - Coastal and Marine System Science, Issues and Applications Seminar (1 credit)

Electives (18 Credit Hours)

Choose 18 credit hours

Electives must be 500 level or above courses from BIOL, CHEM, CMSS, CMWS, MATH, MSCI, PHYS, STAT, or other approved graduate course.

A maximum of 9 credit hours at the 500 level may be used towards completing degree requirements. A maximum of 6 special topics or internship credits may be used towards completing degree requirements.

Graduate Council (*moved and seconded in committee*)
Proposal(s) for new graduate course(s):

COLLEGE OF HUMANITIES AND FINE ARTS

1. **Department of Politics**

a. **POLI 610 – Political Ethics** (Form C – ID# 302)

Proposed catalog description: POLI 610 - Political Ethics (3 Credits). A study of ethical decision making in politics. Students study a variety of philosophical traditions as they relate to political institutions and behavior, and apply this theoretical knowledge to real-world scenarios. F, S, Su.

Course Prefix/Number: POLI 610

Course Title: Political Ethics

Primary Goal: This course will be a required class in the new Master of Arts in Applied Politics program.

Repeatable for Credit: No

Course Equivalencies: No

Prerequisite(s): None

b. **POLI 603 – Qualitative Methods** (Form C – ID# 308)

Proposed catalog description: POLI 603 - Qualitative Methods (3 credits). This graduate survey course provides an overview of the most common qualitative research methods used in the study of politics. A variety of research traditions and topics are covered including: epistemological questions and research design, positivism, post-positivism, concept formation, counterfactuals, interviews, discourse analysis and archival work. F, S, Su.

Course Prefix/Number: POLI 603

Course Title: Qualitative Methods

Primary Goal: This course is one of two required methods classes in the Applied Politics, M.A. program.

Repeatable for Credit: No

Course Equivalencies: No

Prerequisite(s): None

c. **POLI 514 – Think Tanks and Foreign Policy** (Form C – ID# 309)

Proposed catalog description: POLI 514 - Think Tanks and Foreign Policy (3 credits). This graduate course provides an assessment of the role of think tanks in the formulation of US foreign policy. The course examines the origins of the US think tank community,

its role during the Cold War, and contemporary patterns of think tank policy advocacy in the context of the digital marketplace of ideas. F, S, Su.

Course Prefix/Number: POLI 514

Course Title: Think Tanks and Foreign Policy

Primary Goal: This course is one of several new classes that fulfill elective requirements as part of the international track in the M.A. in Applied Politics program.

Repeatable for Credit: No

Course Equivalencies: No

Prerequisite(s): None

d. POLI 578 – Political Crisis Management (Form C – ID# 310)

Proposed catalog description: POLI 578 - Political Crisis Management (3 credits). This course examines effective leadership responses to political crises. It provides students with the necessary tools to anticipate the attendant managerial, media, logistical, and ethical challenges presented by such crises. The course covers both the theories of crisis leadership and the application of such insights to important case studies. F, S, Su.

Course Prefix/Number: POLI 578

Course Title: Political Crisis Management

Primary Goal: This course is one of several classes that fulfill elective requirements for the Applied Politics, M.A. program.

Repeatable for Credit: No

Course Equivalencies: No

Prerequisite(s): None

e. POLI 556 – Administrative Law (Form C – ID# 351)

Proposed catalog description: POLI 556 - Administrative Law (3 credits). A study of the public law dealing with the structure, authority, policies, and procedures of administrative and regulatory agencies. Covered topics include agency rulemaking, agency adjudication, investigation and enforcement, political control of agencies, judicial review of agency decisions, governmental liability, and rights of public employees. F,S,Su.

Course Prefix/Number: POLI 556

Course Title: Administrative Law

Primary Goal: This course is one of several classes that fulfill elective requirements for the Applied Politics, M.A. program.

Repeatable for Credit: No

Course Equivalencies: No

Prerequisite(s): None

f. POLI 522 – Energy Policy (Form C – ID# 352)

Proposed catalog description: POLI 522 - Energy Policy (3 credits). This course introduces students to global energy challenges in the context of shifting agendas, focusing on energy security, development, and sustainability. The course discusses the existing spectrum of institutional arrangements in global energy governance, and evaluates various energy policies in regional and global context. F, S, Su.

Course Prefix/Number: POLI 522

Course Title: Energy Policy

Primary Goal: This course is one of several classes that fulfill elective requirements for the Applied Politics, M.A. program.

Repeatable for Credit: No

Course Equivalencies: No

g. POLI 513 – Gender, Democracy and Global Politics (Form C – ID# 353)

Proposed catalog description: POLI 513 - Gender, Democracy and Global Politics (3 credits). This course offers a survey of classic and contemporary scholarship on women and gender in global politics. Topics may include but are not limited to women's political participation and representation, women's role in the family, economy, and the state, and women's experiences with collective violence, war, human rights, and globalization. F, S, Su.

Course Prefix/Number: POLI 513

Course Title: Gender, Democracy and Global Politics

Primary Goal: This course is one of several classes that fulfill elective requirements for the Applied Politics, M.A. program.

Repeatable for Credit: No

Course Equivalencies: No

h. POLI 576 – The Bureaucracy (Form C – ID# 354)

Proposed catalog description: POLI 576 - The Bureaucracy (3 credits). A study of how the state and federal bureaucracies function in a political context. Selected covered topics include political control of the bureaucracy, the political structure of bureaucracy, agency relationships, information transmission within bureaucratic contexts, and bureaucratic behavior. F, S, Su

Course Prefix/Number: POLI 576

Course Title: The Bureaucracy

Primary Goal: This course is one of several classes that fulfill elective requirements for the Applied Politics, M.A. program.

Repeatable for Credit: No

Course Equivalencies: No

- i. **POLI 572 – State and Local Government** (Form C – ID# 355)
Proposed catalog description: POLI 572 – State and Local Government (3 Credits). A content-based course that provides an overview of how state and local governments function as well as what it means to work in and with state and local government as administrators, campaigners, and non-government organizations. F, S.

Course Prefix/Number: POLI 572

Course Title: State and Local Government

Primary Goal: This course is one of several classes that fulfill elective requirements for the Applied Politics, M.A. program.

Repeatable for Credit: No

Course Equivalencies: No

- j. **POLI 570 – Election Law** (Form C – ID# 356)
Proposed catalog description: POLI 570 - Election Law (3 credit). This course provides an overview of the laws and rules which govern elections in the United States. The course explores electoral system variation and examines the implications of this variation. Students also explore judicial decisions relating to electoral institutions. F, S, Su.

Course Prefix/Number: POLI 570

Course Title: Election Law

Primary Goal: This class will support the creation of the new M.A. in Applied Politics

Repeatable for Credit: No

Course Equivalencies: No

- k. **POLI 601 – Introduction to Applied Politics** (Form C – ID# 357)
Proposed catalog description: POLI 601 – Introduction to Applied Politics (3 Credits). A content-based introductory course that provides an overview about the differences between political science and applied politics as well as the major areas of study in the applied politics field including the fundamentals of political communication, campaign strategy and interest group organization. F, S.

Course Prefix/Number: POLI 601

Course Title: Introduction to Applied Politics

Primary Goal: This course will be a required class for all students in the new M.A. in Applied Politics program.

Repeatable for Credit: No

Course Equivalencies: No

- l. **POLI 577 – Political Communication** (Form C – ID# 359)
Proposed catalog description: POLI 577 – Political Communication (3 credits). A study of the central theories and practices of political communication in campaigns. Students develop communication strategies and key communication documents such as

television advertisements, speeches, and website/social media content as well as understanding how to effectively manage the media. F, S.

Course Prefix/Number: POLI 577

Course Title: Political Communication

Primary Goal: This course will be elective for all students in the new M.A. in Applied Politics program.

Repeatable for Credit: No

Course Equivalencies: No

m. POLI 606 – Quantitative Methods (Form C – ID# 362)

Proposed catalog description: POLI 606 - Quantitative Methods (3 credits). This course introduces students to data collection and analysis in the empirical study of government and policy. Particular attention is paid to hypothesis testing in multivariate models using ordinary least squares, categorical data analysis and other regression methods. F, S, Su.

Course Prefix/Number: POLI 606

Course Title: Quantitative Methods

Primary Goal: This course will be a required course in the new Master of Arts in Applied Politics program.

Repeatable for Credit: No

Course Equivalencies: No

n. POLI 573 – Legislative Affairs (Form C – ID# 365)

Proposed catalog description: POLI 573 - Legislative Affairs (3 credits). This course examines how the U.S. Congress functions and what motivates its members. Students analyze legislative procedure; legislative decision-making; legislative structure; leadership and power; legislative polarization and executive-legislative relations. F, S, Su.

Course Prefix/Number: POLI 573

Course Title: Legislative Affairs

Primary Goal: This course will be elective for all students in the new M.A. in Applied Politics program.

Repeatable for Credit: No

Course Equivalencies: No

o. POLI 583 – Political Advocacy (Form C – ID# 366)

Proposed catalog description: POLI 583 - Political Advocacy (3 credits). This course explores the skills necessary to operate as an advocate for an issue(s), non-profit agency, or company/industry within the political or governmental context. The course examines ways in which citizens and their advocates can access government and introduces students to effective strategies for advocating on behalf a cause, company, or non-profit entity. F, S, Su.

Course Prefix/Number: POLI 583

Course Title: Political Advocacy

Primary Goal: This course is required for students who choose the M.A. in Applied Politics, Advocacy concentration.

Repeatable for Credit: No

Course Equivalencies: No

p. POLI 579 – Political Consulting (Form C – ID# 367)

Proposed catalog description: POLI 579 - Political Consulting (3 credits). This course explores the origins and operations of modern political consulting. It introduces students to the ways in which consultants and consulting firms facilitate the practice of contemporary political campaigns. The course also investigates the realities of running a successful consulting firm while adhering to ethical principles of political management. F, S, Su.

Course Prefix/Number: POLI 579

Course Title: Political Consulting

Primary Goal: This course is required for students who choose the M.A. in Applied Politics, Governing concentration.

Repeatable for Credit: No

Course Equivalencies: No

q. POLI 568 – Campaign Management (Form C – ID# 368)

Proposed catalog description: POLI 568 - Campaign Management (3 credits). This course is an examination of the elements and processes of political campaigns and their applicability in modern democratic societies. Topics for the course will include campaign organization, message development, fundraising, opposition research and media relations. The focus of the course is primarily on electoral campaigns at the state and local levels of government. F, S, Su.

Course Prefix/Number: POLI 568

Course Title: Campaign Management

Primary Goal: This course will be an elective in the new Master of Arts in Applied Politics program.

Repeatable for Credit: No

Course Equivalencies: No

COLLEGE OF SCIENCE

1. Department of Coastal Marine and Systems Science

a. CMSS 661 – Fluids Forum (Form C – ID# 300)

Proposed catalog description: CMSS 661 - Fluids Forum (1 credit). (Prereq: CMSS 530 or CMSS 605, CMSS 600, or permission of instructor). Topics associated with fluid dynamics are explored by reviewing current literature aiding students in connecting fundamental concepts in fluid dynamics to current research. Repeatable multiple times. F, S.

Course Prefix/Number: CMSS 661

Course Title: Fluids Forum

Primary Goal: This course provides an additional elective for students whose study area is related to fluid dynamics, which can exist from a number of different sub-disciplines, e.g., biology, chemistry, oceanography, meteorology, hydrology, etc.

Repeatable for Credit: Yes

Course Equivalencies: No

b. CMSS 567 – Paleo-Ecology and Paleo-Biogeography (Form C – ID# 304)

Proposed catalog description: CMSS 567- Paleo-Ecology and Paleo-Biogeography (3 credits). This course offers an introduction to concepts and applications in Paleontology, Paleo-Ecology and Paleo-Biogeography. Principles and dynamics from species to ecosystem levels use these tools to reconstruct paleo-environmental conditions. Their variabilities are discussed. S.

Course Prefix/Number: CMSS 567

Course Title: Paleo-Ecology and Paleo-Biogeography

Primary Goal: This course will help to close the existing gap between the more ecologically and the more geologically oriented students in the CMWS program. It will add a new advanced component by combining knowledge and techniques from these two disciplines.

Repeatable for Credit: No

Course Equivalencies: No

c. CMWS 704 – Environmental Quality Lab Internship II (Form C – ID# 305)

Proposed catalog description: CMWS 704 - Environmental Quality Lab Internship II (3 credits). (Prereq: CMWS 703 and permission of instructor). Supervised field and lab work in CCU's Environmental Quality Lab. Requires a minimum of 225 hours. This is the second in a two course internship sequence. First course is CMWS 703 – Environmental Quality Lab Internship I (3 credits). F, S, Su.

Course Prefix/Number: CMWS 704

Course Title: Environmental Quality Lab Internship II

Primary Goal: Provides student flexibility for earning internship credit in the EQL in two 3-credit blocks spread across two semesters rather than one 6-credit block completed in one semester.

Repeatable for Credit: No

Course Equivalencies: No

- d. **CMWS 703 – Environmental Quality Lab Internship I** (Form C – ID# 306)
Proposed catalog description: CMWS 703 - Environmental Quality Lab Internship I (3 credits). (Prereq or coreq: CMWS 616 and permission of instructor). Supervised field and lab work in CCU's Environmental Quality Lab. Requires a minimum of 225 hours. This is the first in a two course internship sequence. Second course is CMWS 704 – Environmental Quality Lab Internship II (3 credits). F, S, Su.

Course Prefix/Number: CMWS 703

Course Title: Environmental Quality Lab Internship I

Primary Goal: Provides student flexibility for earning internship credit in the EQL in two 3-credit blocks spread across two semesters rather than one 6-credit block completed in one semester.

Repeatable for Credit: No

Course Equivalencies: No

- e. **CMSS 615 – Coastal and Marine Biological Processes** (Form C – ID# 339)
Proposed catalog description: CMSS 615 - Coastal and Marine Biological Processes (3 credits). Course emphasizes current hypotheses concerning the complex processes controlling the structure and function of marine communities and ecosystems. Processes are discussed in the context of intertidal, estuarine, coral reef, deep sea, salt marsh, and pelagic habitats. S.

Course Prefix/Number: CMSS 615

Course Title: Coastal and Marine Biological Processes

Primary Goal: Course will expand the number of 600 level courses available to students in the Department of Coastal and Marine Systems Science and the Program of Coastal Marine and Wetlands Studies, especially in the area of Biological Oceanography. The course will also contribute to the forthcoming M.S. degree in Biology.

Repeatable for Credit: No

Course Equivalencies: No