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# University Course Review Committee

**Minutes**

**Meeting # 280**

# March 9, 2016 Tobin Room, Knight Hall

# 2:00 PM

#

**Present:** Lane Buchanan, Bruce Cameron, Audrey Shalinisky, Rex Gantenbein, Reed Scull, Leslie Rush, Dennis Coon, and Matthew Troyanek

## Part I – Course Modifications (Consent Agenda)

* ***College of Agriculture***

**ANSC**

**4250 ADVANCED EQUINE PRODUCTION MANAGEMENT, 3 hrs.**

***Current Course Description:*** A capstone course for students wanting to pursue a career in the equine industry with main focus on equine management. Business applications, health, facilities, and management will be explored in depth. Integrates equine breeding, nutrition, and reproductive physiology in equine production management schemes.

***Prerequisite:*** ANSC 1030 and 3150.

***Proposed Prerequisite:*** ANSC 1300, 3100, 4120, and 4540.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**ANSC**

**4540/**

**5540 PRINCIPLES OF ANIMAL BREEDING, 3 hrs.**

***Current Course Description:*** Discusses genetic principles underlying animal improvement; introductory population genetics; heritability; systems of mating; and selection.

***Prerequisite:*** MATH 1000 or a statistics course; LIFE 3050.

***Dual Listed:*** ANSC 4450 / 5540.

***Proposed Prerequisite:*** STAT 2050 or 2070.

***Enforce in Banner:*** No

***Proposed Term:*** Fall 2016

**Action:** Approve

**FDSC**

**3060 PRINCIPLES OF MEAT SCIENCE, 3 hrs.**

***Current Course Description:*** Fabrication of carcasses into cuts and associated processing techniques; muscle growth, structure and metabolism; conversion of muscle into meat; fresh meat properties and quality; chemical properties of meat; meat microbiology, preservation and storage; meat by-products; HACCP.

***Prerequisite:*** CHEM 1000 and LIFE 1010.

***Proposed Course Title:*** PRINCIPLES OF MEAT SCIENCE AND MUSCLE BIOLOGY

***Proposed Course Description:*** Principles of muscle, adipose, and connective tissue growth, structure and metabolism; conversion of muscle into meat; fresh meat properties and quality; chemical properties of meat; meat microbiology, preservation and storage; meat by-products; HACCP.

***Proposed Prerequisite:*** STAT 2050 or 2070.

***Enforce in Banner:*** No

***Proposed Term:*** Fall 2016

**Action:** Approve

* ***College of Arts & Sciences***

**COJO**

**2090 PERSUASION, 3 hrs.**

***Current Course Description:*** Studies human communication as a change agent. Emphasizes relationships of attitudes to behavior, behavioral research and contemporary theories.

***Prerequisite:*** COJO 1030 or 1040.

***Current USP:*** None.

***Proposed Course Title:*** PERSUASIVE ARGUMENTATION

***Proposed Course Description:***  Develops student competencies in persuasive argument in its written, oral, and digital dimensions. Students participate in a series of debate exercises that draw upon digital research, written speech and message composition, and extemporaneous oral speaking. The ethics of persuasion and critical research literacy in a digital environment are also featured.

***Proposed Prerequisite:*** Successful completion of a COM-1 course.

***Enforce in Banner:*** Y

***Proposed USP:*** COM 2

***Proposed Term:*** Fall 2015

**Action:** Approve

**ENGL**

**1040 INTRODUCTION TO CREATIVE WRITING, 3 hrs.**

***Current Course Description:*** Focus on critical learning skills as they relate to creative writing. Read from a variety of genres, attend literary events on campus, acquire research skills, and produce creative writing. Will produce portfolios of creative work in these areas, along with a self-reflective essay applying the critical skills learned throughout the semester.

***Prerequisite:*** None.

***Proposed Course Prefix:*** CW

***Proposed Term:*** Fall 2016

**Action:** Approve

**ENGL**

**2050 INTRODUCTION TO FICTION, 3 hrs.**

***Current Course Description:*** Analyzes forms of fiction and the practice of creative writing at an introductory level.

***Prerequisite:*** WA or COM1

***Proposed Course Prefix:*** CW

***Proposed Term:*** Fall 2016

**Action:** Approve

**ENGL**

**2060 INTRODUCTION TO NON-FICTION, 3 hrs.**

***Current Course Description:*** The new nonfiction course will be described according to the emphasis the individual professor chooses to impart. In general, the course will teach students to research, organize, and express themselves in a nonfiction genre, such as essay, memoir, article, biography, autobiography, etc.

***Prerequisite:*** WA or COM1

***Proposed Course Prefix:*** CW

***Proposed Term:*** Fall 2016

**Action:** Approve

**ENGL**

**2070 CREATIVE AUTOBIOGRAPHICAL WRITING, 3 hrs.**

***Current Course Description:*** Students read and explore in writing five autobiographical forms: brief bio for publicity and job application purposes, memoir, personal essay, confession and fictional monologue. What you can reveal about yourself, when and how and for whom.

***Prerequisite:*** WA or COM1

***Proposed Course Prefix:*** CW

***Proposed Term:*** Fall 2016

**Action:** Approve

**ENGL**

**2080 INTRODUCTION TO POETRY, 3 hrs.**

***Current Course Description:*** Analyzes forms of poetry and practice of creative writing at introductory level

***Prerequisite:*** WA or COM1

***Proposed Course Prefix:*** CW

***Proposed Term:*** Fall 2016

**Action:** Approve

**ESL**

**1210 ENGLISH COMPOSITION FOR INTERNATIONAL STUDENTS, 3 hr.**

***Current Course Description:*** Accommodates students of different cultures and different levels of English proficiency. The objective is to equip students with procedural knowledge - a set of routines that can be applied in various academic writing patterns, such as description, process analysis, argumentation and the research essay.

***Prerequisites:*** AS 1000.

***Proposed Course Description:*** The objective is to equip international students with procedural knowledge - a set of routines that can be applied in various academic writing patterns, such as description, process analysis, argumentation and the research essay.

***Proposed Prerequisites:*** TOEFL Writing sub-score of 18 or higher, IELTS Writing sub-score of 5 or higher; or instructor’s consent.

***Proposed Term:*** Fall 2016.

**Action:** Approve

**GEOL**

**2005 INTRODUCTION TO GEOPHYSICS, 3 hr.**

***Current Course Description:*** Mechanisms and driving forces of Earth deformation, at length-scales from the tectonic to the micro-structural. Introduces solid bodies, including stress and strain, rheologies and cracking, with applications to plate tectonics, deformation of rocks and surficial processes. Fluid and heat flow is introduced, with applications to tectonic and hydrologic problems.

***Prerequisites:*** 1000 Level GEOL course with lab, MATH 1405 or higher.

***Proposed Course Number:*** GEOL 3005

***Proposed Course Title:*** PRINCIPLES OF GEOPHYSICS

***Proposed Course Description:*** 3005. Principles of Geophysics. 4. Mechanisms and driving forces of Earth deformation, at length-scales from the tectonic to the microstructural. Introduces solid bodies, including stress and strain, with applications to plate tectonics, and surficial processes. Heat flow, electrical and electromagnetic fields are introduced, with applications to tectonic and hydrologic problems. (Normally offered fall semester).

***Proposed Prerequisites:*** 1000-level GEOL course with lab, PHYS 1110 or 1210.

***Enforce in Banner***: Yes.

***Proposed Term:*** Fall 2016.

**Action:** Approve

**GEOL**

**4717 FIELD GEOLOGY, 2 to 6 hr. (max 6)**

***Current Course Description:*** Reviews field observation of geologic phenomena, methods of geologic mapping and interpretation of data collected. Includes a six-week field trip.

***Prerequisites:*** GEOL 2100, 4610.

***Proposed Credit Hours:*** 1 to 8 hr. (max 8)

***Proposed Term:*** Summer 2017

**Action:** Approve

**LANG/**

**SPAN**

**1101 FYS: SPANISH FOOD, 3 hrs.**

 ***Current Course Description:*** Is food ever just about food? Of course not! Food and culture are inseparable and this course introduces culture, cuisine and customs through food in Spanish-speaking countries and teaches you to critically evaluate the differences in food culture and how these differences developed. You will also see how these ideas are reflected in literature and television and how this relates to your own experiences

***Prerequisite***: Freshman standing.

 ***Proposed Course Title:*** FYS: FOOD, CULTURE, And LANGUAGE

***Proposed Course Description:***  What judgments do we hold about food, language and culinary customs? This course introduces culture and language surrounding global cuisines. You will critically evaluate differences, how they developed, and how they are reflected in popular culture, relate them to your own experiences and regions of interest.

***Prerequisite***: Freshman standing.

***Enforce in Banner***: Yes.

***Cross Listing***: SPAN 1101, LANG 1101

***Proposed Term:***  Fall 2016

**Action:** Approve

**SOC/**

**INST**

**4110 INTERNATIONAL DEVELOPMENT, 3 hr.**

***Current Course Description:*** Surveys development studies and rural change, including case studies of deliberate change efforts toward industrialization. Includes peasant modes of food production, daily life in subsistence, agriculture, shifts to commercial agriculture and global economy, ethical and critical issues of induced change and different approaches to development process and outcomes.

***Prerequisites:*** SOC 1000 or ANTH 1200; SOC 3000 recommended.

***Cross listed:*** INST 4110, SOC 4110.

 ***USP:***  COM III and WC

***Proposed USP:*** None

***Proposed Term:***  Spring 2017

**Action:** Approve

**SPAN**

**3070 INTENSIVE SPANISH ABROAD, 3 hr.**

***Current Course Description:*** Three-week intensive Spanish language study in private language schools throughout Latin America and Spain. Program includes four hours of class per day in classes of four to eight students per teacher, room and board with host family and UW faculty escort.

***Prerequisites:*** SPAN 2030.

***Proposed Credit Hours:*** 3 hr. (max 9)

***Proposed Course Description:*** Spanish language and cultural study in Spanish-speaking countries led by UW faculty.

***Proposed Prerequisites:*** SPAN 2030 or consent of instructor.

***Enforce in Banner***: No

***Proposed Term:*** Summer 2016

**Action:** Approve

* ***College of Engineering***

**ARE**

**1600 ARCHITECTURAL DESIGN STUDIO I, 3 hrs.**

***Current Course Description:*** Freshman-level architectural design in a project-based learning environment. Introduction to Building Information Modeling (BIM); architectural presentation drawings; freehand sketching; essentials of architectural design and building code compliance.

***Prerequisites:*** MATH 1450 or MATH 1405

***Proposed Prerequisites:*** None.

***Enforce in Banner:*** No

***Proposed Term:*** Fall 2016

**Action:** Approve

**ARE**

**3030 HISTORY OF ARCHITECTURE, 3 hrs.**

***Current Course Description:*** A survey of the history of architecture and its allied fields, focusing on the formal, aesthetic, cultural and socio-political dimensions, from prehistory to the present.

***Prerequisites:*** WA or COM1

***Current USP:*** CH, G

***Proposed Dual List:*** ART 3030

***Proposed Prerequisites:*** COM 1

***Enforce in Banner:*** Yes

***Proposed USP:*** H

***Proposed Term:*** Fall 2015

**Action:** Approve

**ARE**

**3300 BUILDING ELECTRICAL AND PLUMBING SYSTEMS I, 3 hrs.**

***Current Course Description:*** Introduction to National Electrical Code. The topics include basic circuits, AC and DC single phase, three phase power, transients, capacitance and inductance, branch circuits. Study of plumbing systems and fixtures including wastewater, water supply, storm water, and venting systems. Study of International Plumbing Code.

***Prerequisites:*** ES 2210, ES 2330, and ARE 2410.

***Proposed Prerequisites:*** ARE 2410, ES 2210 or concurrent enrollment, and ES 2330 or concurrent enrollment.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**ARE**

**4720 STRUCTURAL SYSTEMS DESIGN PROJECT, 4 hrs.**

***Current Course Description:*** Final course in the building structural systems sequence incorporating elements of previous design courses by executing design of a hypothetical building with a concentration on a detailed design of the project's structural systems.

***Prerequisites:*** ARE 4200, 4250, 4260, and 4600.

***Proposed Prerequisites:*** ARE 4200, 4250, 4260, and 4600 or concurrent enrollment.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**ARE**

**4740 MECHANICAL SYSTEM DESIGN PROJECT, 4 hrs.**

***Current Course Description:*** Final course in the building mechanical systems sequence incorporating elements of previous design courses by executing design of a hypothetical building with a concentration on a detailed design of the project's mechanical systems.

***Prerequisites:*** ARE 3300, ARE 3400, ARE 4600, and one of ARE 4330, ARE 4390, ARE 4430, or ARE 4490.

***Proposed Prerequisites:*** ARE 3400 and ARE 4430 or ARE 4490 or concurrent enrollment.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**BE**

**4810/**

**5810 BIOINSTRUMENTATION, 3 hr.**

***Current Course Description:*** Electronic systems used to monitor physiological systems and function (cardiovascular, pulmonary, nervous); transducer systems, amplifiers and recording systems used in research and clinical applications. Laboratory.

***Prerequisites:*** EE 3330.

***Proposed Prerequisite:***  EE 2210 or similar electric circuit course.

***Enforce in Banner:*** No

***Proposed Dual Listing:*** BE 5810, BE 4810

***Proposed Term:*** Fall 2016

**Action:** Approve

**BE**

**4820 BIO DATA SYSTEMS, 3 hr.**

***Current Course Description:*** Extraction of physiological signals from noise, biomedical signal and image processing, and modeling of physiological functions from experimental data. Includes hands-on exercises using both simulated and actual biomedical signals and/or images. Complements BE 4810 and can be taken alone, before, or after BE 4810. ***Prerequisites:*** EE 3220 or consent of instructor.

***Proposed Course Title:***  BIOMEDICAL SIGNAL PROCESSING

***Proposed Prerequisite:***  EE 3220 or similar linear systems course.

***Enforce in Banner:*** No

***Proposed Term:*** Fall 2016

**Action:** Approve

**ARE**

**5600 COLLABORATIVE BLM DESIGN, 3 hrs.**

***Current Course Description:*** An advanced comprehensive building design course integrating architectural and engineering skills, where design decisions are supported by performance simulation and analysis. Students will use Building Information Modeling (BIM) software and simulate a professional Integrated Project Delivery (IPD) experience by collaborating with a practicing architect on a real-world project.

***Prerequisites:*** ARE 3100 and ARE 4600

***Proposed Prerequisites:*** ARE 3600

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**CE**

**1010 CIVIL ENGINEERING TOOLS, 3 hrs.**

***Current Course Description:*** This course is an introduction to computing tools commonly used in civil engineering practice including 3-D Computer Aided Drafting, spreadsheets and presentation software. Tools will be introduced through design work on typical civil engineering design projects.

***Prerequisites:*** ARE/CE 1000 and corequisite MATH 2200

***Proposed Prerequisites:*** Corequisite of ARE 1000 or CE 1000 and MATH 2200.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**CE**

**2070 ENGINEERING SURVEYING, 3 hrs.**

***Current Course Description:*** Principles of measurements of distances, elevation and angles. Basic error theory in measurement and calculations. Traverse field techniques and office calculations. Basic principles of surveying and map making.

***Prerequisites:*** Significant surveying experience or ES 1060

***Proposed Prerequisites:*** Corequisite of MATH 1450 or MATH 1405.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**CE**

**3500 TRANSPORTATION ENGINEERING, 3 hrs.**

***Current Course Description:*** Introduction to the major topics in Transportation Engineering. Focus areas include roadway and non-motorized facility design, traffic operations, transportation planning, and pavement materials and design.

***Prerequisites:*** CE 2070. (Normally offered spring semester).

***Proposed Prerequisites:*** None.

***Enforce in Banner:*** No

***Proposed Term:*** Fall 2016

**Action:** Approve

**CE/**

**ARE REINFORCED MASONRY DESIGN, 3 hrs.**

**4280 *Current Course Description:*** Design of structural components in reinforced masonry buildings, including walls, columns, beams and connections. Particular attention is paid to current codes, specifications and analysis. Identical to ARE 4280.

***Prerequisites:*** ARE/CE 4269 and concurrent enrollment in ARE/CE 4200.

***Current Dual List:*** CE 4280 and ARE 4280.

***Proposed Course Number:*** 4285 - 5285

***Proposed Course Description:*** Design of structural components in reinforced masonry buildings, including walls, columns, beams and connections. Particular attention is paid to current codes, specifications and analysis. Cross listed with CE 4285. Dual listed with ARE 5285 and CE 5285. Offered on a three semester rotation. Prerequisites: ARE/CE 4260 and ARE/CE 3200. (Normally offered fall semester)

***Proposed Course Title:*** MASONRY DESIGN

***Proposed Prerequisites:*** ARE/CE 4260 and ARE/CE 3200.

***Enforce in Banner:*** No

***Proposed Dual List:*** CE 4285, ARE, 4285, CE 5285 and ARE 5285.

***Proposed Term:*** Fall 2016

**Action:** Approve

**CE**

**4975 CIVIL AND ARCHITECTURAL INTERNSHIP, 1 to 3 hrs. (max 3)**

***Current Course Description:*** Students may apply for credit for extended work experience (>10 weeks; full-time) at a professional engineering or architectural firm, supervised by a licensed professional. Students should apply through their adviser prior to the work experience. Enrollment is by departmental approval only. Offered summer only.

***Prerequisites:*** Junior standing.

 ***Cross listed:*** ARE 4975

***Proposed Prerequisites:*** Consent of department head.

***Enforce in Banner:*** No

***Proposed Term:*** Summer 2016

**Action:** Approve

**CHE**

**1005 INTRODUCTION TO CHEMICAL ENGINEERING, 1 hr.**

***Current Course Description:*** Provides an overview of chemical engineering and its role in the current technological importance: energy, biotechnology, production of chemicals, and materials processing. Introduces strategies for solving engineering problems, including ethical considerations and teamwork, discusses process variables, units, mass balance, and data analysis, and incorporates active learning exercises using spreadsheet to solve chemical engineering problems.

***Prerequisites:*** CHEM 1050 or CHEM 1020, and PHYS 1210.

***Proposed Prerequisites:*** Concurrent enrollment in MATH 2200

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**CHE**

**2005 CHEMICAL PROCESS ANALYSIS, 3 hr.**

***Current Course Description:*** Introduces analysis of chemical processes using stoichiometry, material and energy balances, thermodynamics and economics.

***Prerequisites:*** C or better in MATH 2205 and either CHEM 1050 or CHEM 1020.

***Proposed Prerequisites:*** C or better in MATH 2205, C- or better in either CHEM 1050 or CHEM 1020.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**CHE**

**2060 INTRODUCTION TO CHEMICAL ENGINEERING COMPUTING, 3 hr.**

***Current Course Description:*** Introduces chemical engineering problems, develops computational skills needed to solve them, and reinforces a computational tool that will be useful for other CHE classes.

***Prerequisites:*** Grade of C or better in CHE 1005 and concurrent enrollment in MATH 2310.

***Proposed Prerequisites:*** C- or better in CHE 1005 or ES 1060; concurrent enrollment in MATH 2310.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**CHE**

**5190 POLYMETRIC MATERIALS: CHARACTERIZATION AND**

**PROPERTIES, 3 hr.**

***Current Course Description:*** Intended for science and engineering students, is an introduction to the characterization and properties of polymeric materials. Introduces synthesis, architecture, microstructure analysis, molecular weight determination, solution properties, thermal properties and mechanical properties of polymeric materials.

***Prerequisites:*** CHE 4507

***Dual listed:*** CHE 4190

***Proposed Course Title:*** POLYMER CHEMISTRY AND ENGINEERING

***Proposed Course Description:*** This course discusses basic methods in the synthesis of polymers (polymerization) as well as their applications toward to common and new promising polymer products. In addition, the kinetics of these methods, the synthetic processing techniques and the end products will be addressed together with applications and characterization of various polymers.

***Proposed Prerequisites:*** CHE 3015, CHE 4060, and CHEM 2440.

***Enforce in Banner:*** Yes

***Proposed Dual listed:*** None

***Proposed Term:*** Fall 2015

**Action:** Approve

**EE**

**2220 CIRCUITS AND SIGNALS, 3 hr.**

***Current Course Description:*** Review of sinusoidal steady state analysis and ac power. Mutual inductance and linear transformers. Laplace transform. Laplace transform in circuit analysis. Frequency dependent circuits, including RLC circuit resonance. Magnitude and phase response, complex poles and zeros. Bode plots. Filter circuit fundamentals. Fourier series.

***Prerequisites:*** ES 2210

***Proposed Course Description:*** Review of sinusoidal steady state analysis and ac power. Mutual inductance and linear transformers. Laplace transform. Laplace transform in circuit analysis. Frequency dependent circuits, including RLC circuit resonance. Magnitude and phase response, complex poles and zeros. Bode plots. Filter circuit fundamentals. Fourier series. Laboratory. (Offered in the spring semester only.)

***Proposed Term:*** Fall 2016

**Action:** Approve

**EE**

**3150 ELECTROMAGNETICS, 3 hr.**

***Current Course Description:*** A thorough study of static electric and magnetic fields using vector methods with an introduction to dynamic fields.

***Prerequisites:*** ES 2210 and MATH 2210.

***Proposed Prerequisites:*** ES 2210, MATH 2210, and PHYS 1220.

***Proposed Term:*** Fall 2016

**Action:** Approve

**EE**

**3220 SIGNALS AND SYSTEMS, 3 hr.**

***Current Course Description:*** Discrete and continuous-time signals and systems. Topics include linear time-invariant systems; convolution; difference equations; FIR and IIR systems; sampling, aliasing, reconstruction, and quantization. Frequency domain concepts include discrete and continuous Fourier transforms, Z-transforms, system frequency response, Laplace transform properties, and applications of digital filters and DFT analysis.

***Prerequisites:*** EE 2220

***Proposed Course Description:*** Discrete and continuous-time signals and systems. Topics include linear time-invariant systems; convolution; difference equations; FIR and IIR systems; sampling, aliasing, reconstruction, and quantization. Frequency domain concepts include discrete and continuous Fourier transforms, Z-transforms, system frequency response, Laplace transform properties, and applications of digital filters and DFT analysis. (Offered in the spring semester only.)

***Proposed Term:*** Fall 2016

**Action:** Approve

**EE**

**3310 ELECTRONICS I, 3 hr.**

***Current Course Description:*** Physical characteristics and models of semiconductor devices with application to electronic circuit design. Rectifiers, biasing, load lines, amplifiers, with an introduction to operational amplifiers. Laboratory. (Offered both semesters).

***Prerequisites:*** EE 2220 and PHYS 1220 or PHYS 1320.

***Proposed Course Description:*** Physical characteristics and models of semiconductor devices with application to electronic circuit design. Rectifiers, biasing, load lines, amplifiers, with an introduction to operational amplifiers. Laboratory. Prerequisite: PHYS 1220 and PHYS 1320 and EE 2220 as a corequisite. (Offered Fall semester only).

***Proposed Prerequisites:*** PHYS 1220 and PHYS 1320 and EE 2220 as a corequisite.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**EE**

**3330 ELECTRONICS II, 3 hr.**

***Current Course Description:*** Current sources, differential and multistage amplifiers; circuits with ideal and non-ideal operational amplifiers; low and high band frequency response, feedback, stability, gain and phase margin of amplifiers; output stages, class A and push-pull; monolithic operational amplifier; oscillators; transistors as switches and introduction to digital electronic circuits. Laboratory.

***Prerequisites:*** EE 3310.

***Proposed Course Description:*** Current sources, differential and multistage amplifiers; circuits with ideal and non-ideal operational amplifiers; low and high band frequency response, feedback, stability, gain and phase margin of amplifiers; output stages, class A and push-pull; monolithic operational amplifier; oscillators; transistors as switches and introduction to digital electronic circuits. Laboratory. (Offered in the spring semester only.)

***Proposed Prerequisites:*** EE 2220 and EE 3310.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**EE**

**3510 ELECTROMECHANICS, 3 hr.**

***Current Course Description:*** Polyphase circuits; ferromagnetic circuits and devices; single phase and polyphase transformers; basic electromechanical energy conversion; steady state characteristics and application of DC machines, AC synchronous and induction machines; fractional-horsepower AC motors. Includes laboratory.

***Prerequisites:*** EE 2220.

***Proposed Prerequisites:*** ES 2210

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**EE**

**4220 PROBABILISTIC SIGNALS AND SYSTEMS, 3 hr.**

***Current Course Description:*** Fundamentals of probability and statistics for engineers; reliability in engineering systems; random processes, statistical estimation, auto/cross correlation and power spectral density functions and linear filtering of random signals.

***Prerequisites:*** EE 3220.

***Proposed Prerequisites:*** EE 3220 and MATH 2210.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**EE**

**4390 MICROPROCESSORS, 3 hr.**

***Current Course Description:*** Design of microcomputers, controllers and instruments which use microprocessors. Semiconductor memory design, CPU architecture, bus structure and timing, input-output interfaces and devices, assembly language programming, assemblers, compilers, editors and simulators. Emphasizes design techniques. Laboratory.

***Prerequisites:*** EE 2390.

***Proposed Course Description:*** Design of microcomputers, controllers and instruments which use microprocessors. Semiconductor memory design, CPU architecture, bus structure and timing, input-output interfaces and devices, assembly language programming, assemblers, compilers, editors and simulators. Emphasizes design techniques. Laboratory. (Normally offered once a year.)

***Proposed Term:*** Fall 2016

**Action:** Approve

**EE**

**4440 COMMUNICATION THEORY 3 hr.**

***Current Course Description:*** Amplitude and angle modulation and demodulation; digital baseband and carrier communication systems; performance of communication systems; and current topics in communication systems.

***Prerequisites:*** (ES 2120 or PHYS 1210), MATH 2210.

***Proposed Prerequisite:*** Amplitude and angle modulation and demodulation; digital baseband and carrier communication systems; performance of communication systems; and current topics in communication systems. (Normally offered once a year.)

***Proposed Prerequisites:*** EE 3220 and EE 4220.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**EE**

**4820 SENIOR DESIGN I, 3 hr.**

***Current Course Description:*** Students choose a senior design project and complete the preliminary design. This stage of senior design includes investigation of alternative solutions that meet the project's requirements, cost analysis, and building the prototype circuit. Periodic oral and written project progress reports are required.

***Prerequisites:*** EE 2390, EE 3330 and corequisite courses in the area of the design project.

***Proposed Course Description:*** Students choose a senior design project and complete the preliminary design. This stage of senior design includes investigation of alternative solutions that meet the project's requirements, cost analysis, and building the prototype circuit. Periodic oral and written project progress reports are required. (Offered in the Fall semester only.)

***Proposed Prerequisites:*** EE 2390 and corequisite courses in the area of the design project.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**EE**

**4830 SENIOR DESIGN II, 3 hr.**

***Current Course Description:*** Students complete the senior design project partially designed in EE 4820. The final result of the senior design project includes assembly of a PC board hardware that meets the project's requirements and final report describing the design procedure, designed hardware and software, and results of final testing. Periodic oral and written project progress reports are required.

***Prerequisites:*** EE 4820 and selected courses in the area of the design project.

***Proposed Course Description:*** Students complete the senior design project partially designed in EE 4820. The final result of the senior design project includes assembly of a PC board hardware that meets the project's requirements and final report describing the design procedure, designed hardware and software, and results of final testing. Periodic oral and written project progress reports are required. (Offered in the Spring semester only.)

***Proposed Prerequisites:*** EE 2390 and corequisite courses in the area of the design project.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**ES**

**2310 COMMUNICATION THEORY, 3 hr.**

***Current Course Description:*** Macroscopic systems involving energy and its various forms. Fundamental concepts including energy, mass and entropy balances. Pure substances and availability. Reversible and irreversible processes.

***Prerequisites:*** (ES 2120 or PHYS 1210), MATH 2210.

***Proposed Prerequisites:*** ES 2120 and MATH 2210.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**ESE**

**3020 ENGINEERING EXPERIMENTATION, 3 hr.**

***Current Course Description:*** Theoretical and experimental study of the dynamics of linear and non-linear lumped parameter models of mechanical, electrical, electronic, fluid, thermal and mixed systems.

***Prerequisites:*** Completion of the ME Success Curriculum, ME/ESE 2020, ES 2210 and MATH 2310.

***Proposed Prerequisites:*** Completion of ME Success Curriculum, ES 2210, and Math 2310.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016.

**Action:** Approve

**ME**

**3005 ENGINEERING EXPERIMENTATION, 3 hr.**

***Current Course Description:*** A combined lecture/laboratory course introducing students to experimental methods in the context of dynamics. Written technical communication, intermediate structured programming, experimental design, fundamental statistics, and uncertainty methods (numerical and analytical) are emphasized. Collaborative writing and teamwork is introduced.

***Prerequisites:*** Completion of the ME Success Curriculum, ES 1060; ES 2120; companion course ME 2005.

***Cross Listed:*** ESE 3005

***Proposed Prerequisites:*** Completion of the ME Success Curriculum, ES 1060; ES 2120; corequisite ME / ENGL 2005.

***Enforce in BANNER:*** Yes.

***Proposed Term:*** Fall 2016.

**Action:** Approve

**ME**

**3020 SYSTEM DYNAMICS, 3 hr.**

***Current Course Description:*** Theoretical and experimental study of the dynamics of linear and non-linear lumped parameter models of mechanical, electrical, electronic, fluid, thermal and mixed systems.

***Prerequisites:*** Completion of the ME Success Curriculum, ME 2020, ES 2210 and MATH 2310.

***Proposed Prerequisites:*** Completion of the ME Success Curriculum, ES 2210 and MATH 2310.

***Enforce in BANNER:*** Yes.

***Proposed Term:*** Fall 2016.

**Action:** Approve

**ME**

**3160 THERMAL / FLUID SCIENCE LAB, 3 hr.**

***Current Course Description:*** A laboratory course to introduce students to experimental methods for temperature measure and pressure/flow characteristics of fluids. Continuation of experience with communication (written, oral, and digital), intermediate programming, experimental design, data analysis, and teamwork skills is emphasized.

***Prerequisites:*** Completion of the ME Success Curriculum, ES 2330; ME/ESE 3005.

***Cross listed:*** ESE 3160

***Proposed Change:*** Change from lab-only to lecture/laboratory. Credit hours must be set at 0 or 3 hrs., for the credit hours option to be available to build the lab section to a 3 hr. lecture.

***Proposed Term:*** Fall 2016.

**Action:** Approve

##  Part II – Courses to Discontinue (Consent Agenda)

* ***College of Arts & Sciences***

**PHYS**

**3100 APPLICATION OF PHYSICS IN THE MODERN WORLD, 3 hrs.**

***Course Description:*** Presents a broad overview of physics concepts and their application to selected topics of current interest such as atmospheric pollution, nuclear radiation and medicine, and nuclear weapons.

***Prerequisite:*** 12 hours university-level biological, physical and/or earth sciences.

***Proposed Term:*** Fall 2016

***Rationale:*** Course hasn’t been offered in 10+ years. We are adding a new course and want to discontinue this course to keep our overall course number the same.

**Action:** Approve

**THEA**

**1020 FRESHMAN SEMINAR: ACADEMIC AND PROFESSIONAL ISSUES IN THEATERS, 3 hr.**

***Course Description:*** Introduces and explores visual aesthetic principles as they relate to various aspects of stage design. Studio projects in scene, lighting, and costume design supplement lectures. Prerequisite for other design courses

***Prerequisites:*** None

***Proposed Term:*** Fall 2016

***Rationale:*** THEA 1020 had been replaced by THEA 1101, Freshman Year Seminar (FYS) that satisfies the FYS component of the USP.

**Action:** Approve

* ***College of Engineering***

**CE**

**2100 CIVIL ENGINEERING SYSTEMS, 3 hrs.**

***Current Course Description:*** The practice of civil engineering is used as a model to introduce how the different areas of civil engineering are interested. Uses examples from several civil engineering projects to introduce computer-aided drafting and design.

***Prerequisites:*** CE 2070 and ES 2110.

***Proposed Term:*** Fall 2016

***Rationale:***  This class is no longer required for a civil engineering degree and was offered for the last time in Fall 2015. The content from this class has been rolled into the newly created VISTA Studio sequence.

**Action:** Approve

**PETE**

**4720 PETROLEUM ENGINEERING DESIGN, 3 hrs.**

***Current Course Description:*** Design and development of petroleum reservoirs using principles and skills learned in the Petroleum Engineering program. Application of software for design and analysis of the drilling, reservoir and production of petroleum fields. ***Prerequisites:*** PETE 3200, 3255, 3715 and 3725.

***Proposed Term:*** Fall 2016

***Rationale:***  To overcome the challenge that students have to wait for one year to take the previous Petroleum Engineering Design in two-semester sequence, the program curriculum committee has decided to consolidate the two-semester course into one semester course that can be offered both in spring and fall semester. The new senior design course will start from Fall 2016, and therefore PETE 4720 will be discontinued from Fall 2016.

**Action:** Approve

**PETE**

**4735 PETROLEUM ENGINEERING DESIGN II, 3 hrs.**

***Current Course Description:*** Design and development of petroleum reservoirs using principles and skills learned in the Petroleum Engineering program. Application of software for design and analysis of the drilling, reservoir and production of petroleum fields. A continuation of PETE 4720.

***Prerequisites:*** PETE 4720.

***Proposed Term:*** Fall 2016

***Rationale:***  To overcome the challenge that students have to wait for one year to take the previous Petroleum Engineering Design in two-semester sequence, the program curriculum committee has decided to consolidate the two-semester course into one semester course that can be offered both in spring and fall semester. The new senior design course will start from Fall 2016, and therefore PETE 4735 will be discontinued from Fall 2016.

**Action:** Approve

## Part III – Courses for Addition (Regular Agenda)

* ***College of Arts & Sciences***

**ENGL**

**2025 INTRODUCTION TO ENGLISH STUDIES, 3 hrs.**

***Proposed Course Description:*** This course provides an introduction to English Studies, covering the history of English as an academic field, the options available within it, and possible career paths. Students will also be taught the skills they need to succeed as English majors, including critical reading and writing, and literary and rhetorical analysis.

***Prerequisite:*** COM1; English major status

***Enforce in Banner:*** Not indicated.

***Proposed USP:*** COM 2

***Proposed Term:*** Fall 2016

***Rationale:*** This course is the required introductory class for our revised major.

**Action:** Approve

**ENGL**

**3000 LITERARY THEORY, 3 hrs.**

***Proposed Course Description:*** An introduction to critical theory as a methodology within literary studies. The course covers major schools of theory and major figures within those schools. Students will read, discuss and write about literary texts and cultural artefacts by placing them in dialogue with important works of both theory and literary criticism.

***Prerequisite:*** ENGL 2025 and Junior standing.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Rationale:*** We are developing two tracks in the English Major: a Literary Studies track and an English Studies track (which includes more courses in Rhetoric & Composition). Each track will include a required Methods course at the junior level; this is the Methods course for Literary Studies students. Currently we offer a literary theory course at the senior level, but we will be replacing that with a capstone “teach your research” course that models academic specialization for our students. We are instead developing a theory course to be offered at the junior level (which I We are developing two tracks in the English Major: a Literary Studies track and an English Studies track (which includes more courses in Rhetoric & Composition). Each track will include a required Methods course at the junior level; this is the Methods course for Literary Studies students. Currently we offer a literary theory course at the senior level, but we will be replacing that with a capstone “teach your research” course that models academic specialization for our students. We are instead developing a theory course to be offered at the junior level (which I describe herein). We feel that students will benefit from having such a class earlier in their academic careers, as they can then implement the methodologies and approaches that they have learned in their senior-level classes.

**Action:** Approve with friendly amendment.

**ENGL**

**3010 APPROACHES TO RHETORIC, COMPOSITION PEDAGOGY, AND PROFESSIONAL WRITING, 3 hrs.**

***Proposed Course Description:*** Introduces common methods, concepts, and theories emphasized in these interrelated intellectual traditions. It asks students to examine how research traditions have developed alongside each other over time, and prepares students to design a multimodal research project.

***Prerequisite:*** ENGL 2025 and Junior standing.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Rationale:*** We are developing two tracks in the English Major: a Literary Studies track and an English Studies track (which includes more courses in Rhetoric & Composition). Each track will include a required Methods course at the junior level; this is the Methods course for Literary Studies students. Currently we offer a literary theory course at the senior level, but we will be replacing that with a capstone “teach your research” course that models academic specialization for our students. We are instead developing a theory course to be offered at the junior level (which I We are developing two tracks in the English Major: a Literary Studies track and an English Studies track (which includes more courses in Rhetoric & Composition). Each track will include a required Methods course at the junior level; this is the Methods course for Literary Studies students. Currently we offer a literary theory course at the senior level, but we will be replacing that with a capstone “teach your research” course that models academic specialization for our students. We are instead developing a theory course to be offered at the junior level (which I describe herein). We feel that students will benefit from having such a class earlier in their academic careers, as they can then implement the methodologies and approaches that they have learned in their senior-level classes.

**Action:** Approve with friendly amendment.

**ENGL**

**4999 SENIOR SEMINAR, 3 hrs.**

***Proposed Course Description:*** This course is the capstone course in the English major. Subject matter varies by section. In all sections students will exercise skills acquired in the major (close-reading, historical analysis, application of theory) to explore significant texts and to reflect on the nature of English study today.

***Prerequisite:*** ENGL 3000 or ENGL 3010 and Senior standing.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Rationale:*** The English department is revising the major. There is a sequence of required courses within the major: a freshman-level gateway course that introduces students to the basic skills and subject matter of inquiry in English; a junior-level approaches course that introduces students to theory in the discipline and prepares them for upper-division study; an a senior seminar capstone experience that allows them to do high-level work in the field under the direction of expert teacher/researchers. This CARF proposal is for the senior seminar course in which a professor will teach an intensive seminar that will require students to draw on the skills and approaches they have developed as English majors and that will culminate in a major piece of independent research. Further, in asking students to engage rigorously with the primary materials of the course, English 4999 will also require them to reflect on the nature and value of the English major as they move beyond their undergraduate days, whether they go on to graduate study or a career outside the academy .

**Action:** Approve with friendly amendment.

**PHYS**

**4720 SOLID STATE ELECTRONIC DEVICES, 3 hrs.**

***Proposed Course Description:*** This course aims to develop basic semiconductor physics concepts, so students can better understand current and future solid state electronic devices and technology.

***Prerequisite:*** PHYS 4210, PHYS 4310, PHYS 4420 and MATH 4440.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Rationale:*** Physics undergraduate students, especially those who are interested in condensed matter physics, need to have some fundamental understanding of modern electronics. This course covers major topics in solid state electronics physics and technology, which include crystal structures of solids, energy bands, majority and minority carries, field effect transistors, etc. This course aims to develop basic semiconductor physics concepts, so students can better understand current and future electronic devices and technology. It will be useful for the physics majors who look for semiconductor industry jobs after graduation.

**Action:** Approve

**SPAN**

**4600 SPECIAL TOPICS IN SPANISH, 1-6 hr. (max 12)**

***Proposed Course Description:*** Presents a variety of significant literature, language, or cultural topics in Latin American, Peninsular, and other Spanish-speaking communities.

***Proposed Prerequisites:*** SPAN 2030 or consent of instructor.

***Enforce in Banner***: Yes

***Proposed Term:*** Summer 2016

***Rationale:*** The Spanish program does not have a topics course. One is needed to provide flexibility in scheduling and cover a range of situations such as alternate offerings on the Laramie campus that take advantage of faculty’s expertise as well as additional offerings during summer study abroad experiences in Spanish-speaking countries.

**Action:** Approve with friendly amendment.

* ***College of Engineering***

**CE**

**5320 ENGINEERING AND ENVIRONMENT GEOPHYSICS, 3 hrs.**

***Proposed Course Description:*** Theoretical background for electrical, electromagnetic, georadar, and other near-surface geophysical measurements. Practical exercises focused on modeling, inversion, data analysis and experimental design. Discussion of applications to engineering and environmental problems. Basic knowledge of MATLAB programing language is helpful, but not required. Prerequisite: Linear Algebra (MATH 2250 or equivalent) or Calculus I (MATH 2200 or equivalent).

***Proposed Prerequisites:*** MATH 2250 or MATH 2200

***Enforce in Banner:*** No

***Proposed Term:*** Spring 2015

***Rationale:*** The CAE department has a strong focus are in geotechnical engineering, however there are currently no course offerings related to engineering geophysics. Geophysical measurement principals are current state of the art assessment methods for certain aspects of civil engineering and have strong relevance to environmental engineering. This course aims to fill the gap in geophysical course content in the CAE department. This content is not adequately covered in breadth or depth in a suitable format for engineering students by any other department (e.g. Geology/Geophysics).

**Action:** Approve

**CE**

**5640 GEOTECHNICAL EARTHQUAKE ENGINEERING, 3 hrs.**

***Proposed Course Description:*** The purpose of this course is to familiarize students with the field of geotechnical earthquake engineering and soil dynamics. Lectures will focus on stress wave propagation in soil and rock; characterization of earthquakes and ground motions; influence of soil conditions on seismic ground motion characteristics; and liquefaction of soils.

***Proposed Prerequisites:*** CE 3600 or Graduate Standing

***Enforce in Banner:*** Yes

***Proposed Term:*** fall 2016

***Rationale:*** This is a new graduate course being prepared by a new faculty member (Shawn Griffiths) in his area of expertise. This course will introduce students to the field of geotechnical earthquake engineering, and prepare them for jobs and research in the field.

 **Action:** Approve

**CE**

**5850 ADVANCED SUBSURFACE HYDROLOGY, 3 hrs.**

***Proposed Course Description:*** This course introduces recent advances in dealing with uncertainty issues in subsurface hydrology. Covered topics include reviewing basic statistics required for the course and subsurface flow and transport, uncertainty analysis using Monte Carlo simulations, sensitivity analysis in flow and contaminant transport, heterogeneity of hydrological processes in subsurface, and Bayesian updating.

***Proposed Prerequisites:*** CE 5810 or CE4800

***Enforce in Banner:*** No

***Proposed Term:*** fall 2016

***Rationale:*** This proposed new graduate level class focuses on advanced topics in subsurface hydrology. In particular, the emphasis is on uncertainty issues associated with subsurface processes. While there are several courses related to subsurface hydrology in the University, we still need an advanced level graduate course that mostly deals with unique features of subsurface hydrology uncertainties as subsurface processes are difficult to characterize. I taught some of the uncertainty topics as CE5700 Civil Engineering Problems in Spring 2014, which were well received.

**Action:** Approve

**CHE**

**4165/**

**5165 BIOMATERIALS, 3 hrs.**

***Proposed Course Description:*** Material science and engineering of the various materials used for biomedical applications, in-depth discussion of the molecular and cellular interactions to implanted materials, as well as a survey of practical applications. Materials covered will include polymers, ceramics, metals, composites, silicones, and natural materials, such as collagen, elastin, and silk

***Proposed Prerequisites:*** LIFE 1010 and CHEM 2420

***Enforce in Banner:*** Yes

***Proposed Dual Listing:*** CHE 5165

***Proposed Term:*** Fall 2016

***Rationale:*** This course has been taught under the topics numbers CHE 4990 and CHE 5150 and should be given a permanent course number.

 **Action:** Approve

**PETE**

**4736 PETROLEUM ENGINEERING DESIGN, 3 hrs.**

***Current Course Description:*** Design and development of petroleum reservoirs using principles and skills learned in the Petroleum Engineering program. Application of software for design and analysis of the drilling, reservoir and production of petroleum.

***Proposed Prerequisites:*** PETE 3200, PETE 3255, PETE 3715, PETE 3725, and C or better in COM2.

***Proposed USP:*** COM III

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2016

***Rationale:***  To overcome the challenge that students have to wait for one year to take the previous Petroleum Engineering Design in two-semester sequence, the program curriculum committee has decided to consolidate the two-semester course into one semester course that can be offered both in spring and fall semester. The new senior design course inherited the prerequisites of first course (PETE 4720) in previous two-semester sequence. Since the COM3 is embedded in this course, COM2 is a necessary prerequisite too.

**Action:** Approve

* ***College of Health Sciences***

**KIN**

**2050 SOCIO-CULTURAL ASPECTS OF PHYSICAL ACTIVITY, EXERCISE AND SPORT, 3 hrs.**

***Proposed Course Description:*** This course examines the role of physical activity, exercise and sport in the promotion of individual and collective physical health and wellness. Students will understand the historical, individual, socio-cultural, environmental and political factors that have shaped the role of these behaviors in contemporary US society.

***Proposed Prerequisites***: Completion of an FYS course, COM 1.

***Enforce in Banner:*** Yes

***Proposed USP:*** H

***Proposed Term:*** FALL 2016

***Rationale:*** With the change towards the USP 2015 program the “P” requirement has been removed. For most students, this physical activity requirement was met through taking PEAC 1001 offered by the Division of Kinesiology and Health. The content of this class included understanding of the role of physical activity in wellness and how to create a physical activity program. This foundational content needs to be replaced within the Kinesiology and Health curriculum. There is also a curricular need to supplement this individualistic perspective on physical activity participation with an understanding of the socio-cultural factors that influence this behavior. Therefore, this class is designed to meet those curricular needs and will be offered at the sophomore level.

 **Action:** Approve

**KIN**

**5011 UNDERSTANDING VARIATION OF HUMAN MOVEMENT, 3 hrs.**

***Proposed Course Description:*** Re-conceptualize the variability of human movement using dynamical system theory as a new theoretical interpretation to the role of variability in motor behavior. Demonstrates how an understanding of variability can enhance the practice of educators, teachers, coaches, physiotherapists, and developmental specialists.

***Proposed Prerequisites***: One course in any of the following areas evaluated and enforced by Kinesiology and Health Registrar/Credential Analyst: Motor Behavior/Learning/Control/Development; Cognitive Psychology; Biomechanics of Human Movement; Human Systems Physiology.

***Enforce in Banner:*** Yes

***Proposed Term:*** FALL 2016

***Rationale:*** Understanding Variability of Human Movement is a graduate level course which has been previously taught as a generic graduate seminar number (KIN 5586). The course will become a permanent offering within the graduate program for Kinesiology and Health so requires a permanent number (KIN 5011).

**Action:** Approve

**PHCY**

**5040 THE EVOLUTION OF AMERICAN HEALTH, 2 hrs.**

***Proposed Course Description:*** This course explores the evolution of the healthcare system in response to various needs and crises over the years. The professionalizaton of health care; the development of the modern hospital; the implications of computerized health information; and the empowerment of patients will be covered.

***Prerequisite:*** Admission into the Health Services Administration MS program.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Rationale:*** This is a new course in the newly approved online Master’s in Health Services Administration offered by the School of Pharmacy.

**Action:** Approve

**PHCY**

**5046 HEALTH SERVICES ADMINISTRATION SEMINAR, 1 hrs.**

***Proposed Course Description:*** An in-depth investigation of a timely issue in health services, including the regulatory, economic, patient-safety, marketing, leadership, and ethical aspects of that issue. Students will participate in separate group analysis of a presented problem, and in presentations of their group’s assessment of the problem.

***Prerequisite:*** Completion or concurrent enrollment in PHCY 5040 The Evolution of American Health Services.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Activity Type:*** Seminar.

***Rationale:*** This is a new course in the newly approved online Master’s in Health Services Administration offered by the School of Pharmacy.

**Action:** Approve

**PHCY**

**5141 INTRODUCTION TO HEALTH ECONOMICS AND OUTCOMES, 3 hrs.**

***Proposed Course Description:*** This course considers the role of the range of outcomes used by clinicians and health care systems in assessing treatment modalities. The framework for conducting and assessing outcomes research will be emphasized.

***Prerequisite:*** Completion or concurrent enrollment in PHCY 5040 The Evolution of American Health Services.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Rationale:*** This is a new course in the newly approved online Master’s in Health Services Administration offered by the School of Pharmacy.

**Action:** Approve

**PHCY**

**5241 INTRODUCTION TO BIOPHARMACEUTICAL REGULATORY COMPLIANCE, 3 hrs.**

***Proposed Course Description:*** This course considers the role of regulatory agencies that prescribe conduct in the healthcare industries and professions, focusing on the Food and Drug Administration. The functioning of other agencies, such as the federal Drug Enforcement Administration, state boards of pharmacy and state departments of health are also considered.

***Prerequisite:*** Completion or concurrent enrollment in PHCY 5040 The Evolution of American Health Services.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Rationale:*** This is a new course in the newly approved online Master’s in Health Services Administration offered by the School of Pharmacy.

**Action:** Approve

**PHCY**

**5541 INTRODUCTION TO BIOPHARMACEUTICAL MARKETING AND PRODUCTION, 3 hrs.**

***Proposed Course Description:*** This course will review empirical evidence in various topic areas within the fields of biopharmaceutical marketing, sales promotion, communication, and selling effectiveness focusing on the history and structure of the biopharmaceutical product representative function and theoretical domains associated with the associated activities.

***Prerequisite:*** Completion or concurrent enrollment in PHCY 5040 The Evolution of American Health Services.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Rationale:*** This is a new course in the newly approved online Master’s in Health Services Administration offered by the School of Pharmacy.

**Action:** Approve

* ***Other Colleges***

**ENR/**

**ZOO**

**5270 WRITING AND REVIEWING SCIENCE, 4 hrs.**

***Proposed Course Description:***  This course will help students prepare a scientific manuscript for submission to a peer-reviewed journal; in so doing, students will become more effective, efficient, and confident writers. Students will learn principles of effective writing, how to prepare a manuscript for publication, navigate the peer-review process, and write a constructive review.

***Proposed Prerequisite:*** Students must have graduate standing and an analyzed dataset on which the manuscript will be based. Students must have approval from their advisors and key collaborators before embarking on this journey. We also encourage students to maintain this approval throughout the semester.

***Enforce in Banner:*** No

***Cross Listing:*** ZOO 5270, ENR 5270

***Proposed Term:***  Fall 2016

***Rationale:*** Scientific writing is a critical process for graduate students in scientific fields. Nevertheless, we rarely teach students how to write effectively, and yet, each student is expected to do so. As a consequence, most students learn by trial and error, or never learn to do so in an effective manner. Moreover, this puts the burden of learning on either the student or the student’s major advisor, which can be a huge burden for the major advisor or a huge source of frustration for the student with a “hands-off” advisor. Our goal with this course is to provide students with the knowledge and tools needed be effective, efficient, and confident writers. Students will learn 1) the principles of effective writing and how to overcome obstacles associated with writing productively, 2) how to format and prepare a manuscript for publication, 3) how to navigate the peer-review process, 3) and how to write a constructive and objective review. Ultimately, the final product will be a complete manuscript ready to submit for publication. This course has a heavy workload for students, because they are required to write a manuscript from start to finish, obtain and provide peer reviews, and respond to peer reviews and revise their manuscript accordingly, all during a single semester. Therefore, the pace of the course is rapid and quite demanding. Moreover, in having offered this course once as a trial run already, we found that the 3 hours of time each week for lecturing and discussion in preparation for writing of each section was rarely adequate. Finally, in the course evaluation following completion of the course during spring 2015, students were asked if the workload and the amount of time available for lecturing and discussion was adequately represented by a 3 credit course, or if it would be advantageous to have the additional in-class time and be more representative of the workload of a 4 credit class. That answer was overwhelmingly 4 credits.

**Action:** Approved

## Part IV – FYS Courses for Addition (Consent Agenda)

* ***College of Engineering***

**ATSC**

**1101 FYS: WEATHER, CLIMATE AND GLOBAL CHANGE, 3 hrs.**

***Proposed Course Description:***  Weather remains the most significant source of uncertainty in our collective day-to-day life, impacting transportation, our leisure time, and the economy. Many of us are fascinated by the vagaries of weather, especially in Wyoming. The typical weather patterns of a place determine its climate. Climate is changing, maybe at a slow pace for humans, but at dazzling speed for the Earth. How does weather work? What controls climate change? This is a survey course that will cover a wide variety of topics to help you gain an understanding of the science behind daily weather, climate and climate change. You will be challenged to think critically using rich visualizations, and use basic principles from physics, chemistry, and even biology to understand the workings of the Earth system and its atmosphere. The aim of the course is not to turn you all into scientists. Rather, this course aims to give you some essential tools for you to gauge and judge predictions about weather and climate.

***Proposed Prerequisite:*** Freshman standing.

***Enforce in Banner:*** Yes

***Proposed Term:***  Fall 2016

***Rationale:*** This course fulfills the First-Year Seminar (FYS) requirement of the 2015 University Studies Program. Students will critically examine and evaluate evidence, claims, beliefs, or points of view about meaningful, relevant issues. Students will be introduced to active learning, inquiry of pressing issues, and individual and collaborative processing of ideas through the First-Year Seminar curriculum.

**Action:** Approve

## Part V – Tabled Courses

* ***College of Arts & Sciences***

**ENGL**

**3200 MEDIEVAL LITERATURE, 3 hrs. (max. 12)**

***Current Course Description:*** This course focuses on the language, literature, history and culture of England between 800 and 1485, including influential texts from continental and Arabic traditions.  Students will be taught to read Middle English and the class will include a translation component.

***Prerequisite:*** COM1 and 6 hours of 2000-level literature course.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Rationale:*** We are revising our historical period coverage requirements in the English major. Students will no longer be required to take our “survey” courses, two 4000-level literature courses before 1900, and the 4000-level Shakespeare course; instead, they will be asked to take 4/5 historical period courses of their choosing (Medieval, Renaissance, C18, C19, and C20/Contemporary Literature). (Students in the English Studies track will only be asked to take 3/5 historical period courses.) This course is part of that revised sequence. The sequence as a whole ensures that students will get a broad historical grounding in Literary Studies.

**Action:** Table

**ENGL**

**3300 RENAISSANCE LITERATURE, 3 hrs. (max. 12)**

***Current Course Description:*** Surveys important authors and texts from Britain, Europe, and the “new world” from 1500-1642. Covers major literary movements and genres, and contextualizes materials by discussing the historical, cultural, and political developments of the period. Examines how literature is produced and consumed in the sixteenth century. Specific focus varies by section.

***Prerequisite:*** COM1 and 6 hours of 2000-level literature course

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

***Rationale:*** We are revising our historical period coverage requirements in the English major. Students will no longer be required to take our “survey” courses, two 4000-level literature courses before 1900, and the 4000-level Shakespeare course; instead, they will be asked to take 4/5 historical period courses of their choosing (Medieval, Renaissance, C18, C19, and C20/Contemporary Literature). (Students in the English Studies track will only be asked to take 3/5 historical period courses.) This course is part of that revised sequence. The sequence as a whole ensures that students will get a broad historical grounding in Literary Studies.

**Action:** Table

**ENGL**

**3400 EIGHTEENTH-CENTURY LITERATURE, 3 hrs. (max. 12)**

***Current Course Description:*** Topics in eighteenth-century American and/or British literatures. Readings situated amid the historical and social developments of the era, including the expansion of mercantilism and slavery, the spread of secularism, the rise of print capitalism, and the emergence of new ideas of self and authorship. Subject matter varies by section.

***Prerequisite:*** COM1, ENGL 2025 and 3 hours of 2000-level literature course

***Enforce in Banner:*** Yes

***Grading System*:** A/F

***Proposed Term:*** Fall 2016

***Rationale:*** The English department is revising the major. Among the requirements in the new major, students must take four out of five historical period courses, from a combination of courses spanning the 2000 and 3000 levels. This CARF proposal is for one of the historical courses, the 3000-level course on eighteenth-century literature.

**Action:** Table

**ENGL**

**3500 NINETEENTH-CENTURY LITERATURE, 3 hrs. (max. 12)**

***Current Course Description:*** This course surveys authors, movements, and/or genres significant to 19th Century American or British Literature, and contextualizes materials by discussing the historical, cultural, and political developments of the period.

***Prerequisite:*** COM1 and 6 hours of 2000-level literature course in ENGL.

***Enforce in Banner:*** Yes

***Grading System*:** A/F

***Proposed Term:*** Fall 2016

***Rationale:*** We are revising our historical period coverage requirements in the English major. Students will no longer be required to take our “survey” courses, two 4000-level literature courses before 1900, and the 4000-level Shakespeare course; instead, they will be asked to take 4/5 historical period courses of their choosing (Medieval, Renaissance, C18, C19, and C20/Contemporary Literature). (Students in the English Studies track will only be asked to take 3/5 historical period courses.) This course is part of that revised sequence. The sequence as a whole ensures that students will get a broad historical grounding in Literary Studies.

**Action:** Table

**ENGL**

**3600 20th - CENTURY LITERATURE, 3 hrs. (max. 12)**

***Current Course Description:*** Surveys important authors and texts from Britain, the U.S., and around the world from 1900 to present-day. Covers major literary movements and genres, including modernism and postmodernism, and contextualizes materials by discussing the historical, cultural, and political developments of the period. Examines how literature is produced in our contemporary moment.

***Prerequisite:*** COM1 and 6 hours of 2000-level literature course in ENGL.

***Enforce in Banner:*** Yes

***Grading System*:** A/F

***Proposed Term:*** Fall 2016

***Rationale:*** We are revising our historical period coverage requirements in the English major. Students will no longer be required to take our “survey” courses, two 4000-level literature courses before 1900, and the 4000-level Shakespeare course; instead, they will be asked to take 4/5 historical period courses of their choosing (Medieval, Renaissance, C18, C19, and C20/Contemporary Literature). (Students in the English Studies track will only be asked to take 3/5 historical period courses.) This course is part of that revised sequence. The sequence as a whole ensures that students will get a broad historical grounding in Literary Studies.

**Action:** Table