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# University Course Review Committee

**Minutes**

**Meeting # 284**

# November 9, 2016 Tobin Room, Knight Hall

# 2:30 PM

**Present:** Lane Buchanan, Audrey Shalinsky, Dennis Coon, Susie Young, Teresa Garcia, Kent Drummond, Bruce Cameron, Matthew Troyanek, Reed Skull.

# 

## Part I – Course Modifications (Consent Agenda)

* ***College of Agriculture***

**FCSC**

**2121 CHILD DEVELOPMENT, 4hrs.**

***Current Course Description:*** Incorporates classroom instruction with laboratory application of child development research and theory in physical, intellectual and social/emotional domains. Emphasizes early childhood years.

***Prerequisites:*** PSYC 1000 or SOC 1000.

***Proposed Prerequisites:*** PSYC 1000 or SOC 1000 or FYS.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**FCSC**

**3145 SPORTS NUTRITION METABOLISM, 3 hrs.**

***Current Course Description:*** Discusses roles played by carbohydrate, fat, protein, water, and key vitamins and minerals as they relate to physical exercise. Applies principles of nutrition.

***Prerequisites:*** FCSC 1140 or 1141, one semester of Chemistry; ZOO 3115 or KIN 3021.

***Proposed Prerequisites:*** FCSC 1141; ZOO 3115.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**FCSC**

**4147 NUTRITION AND WEIGHT CONTROL, 3 hrs.**

***Current Course Description:*** Advanced course in physiological and metabolic determinants of weight control emphasizing pathology, psychodynamics, assessment and treatment of obesity. .

***Prerequisites:*** FCSC 1141 or 1141; ZOO 3115.

***Dual listed:*** FCSC 5147

***Proposed Prerequisites:*** FCSC 1140; ZOO 3115. FCSC 5147 prerequisite remains graduate standing.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

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

**AAST**

**3000 AFRICAN AMERICAN MUSIC, 3 HRS.**

***Current Course Description:*** Surveys African American music from its origins in Africa to current, popular jazz, rock, soul and rap forms.

***Prerequisites:*** AAST 1000 or any AAST 2000-level course.

***Proposed Prerequisites:*** None

***Proposed Term:*** Spring 2017

**Action:** Leave with current prerequisites. Do not enforce prerequisite.

**COJO**

**2060 FORENSICS PRACTICUM, 1 hr. (Max. 8)**

***Current Course Description:*** Prerequisite: consent of forensics director. (Offered fall and spring semesters).

***Prerequisites:*** Consent of Forensics Director.

***Proposed Credit Hours:*** 1 to 3 hr. (max 12)

***Proposed Course Number:*** COJO 2099

***Proposed Course Title:*** SPECIAL TOPICS IN DEBATE

***Proposed Course Description:*** Explores the argumentative and rhetorical facets of the annual intercollegiate policy debate topic. Participation on the University’s debate team is required for enrollment. Prerequisite: consent of the Director of Forensics (Offered fall, spring, and summer).

***Proposed Prerequisites:*** Instructor permission required.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**MUSC**

**4652 STRING CHAMBER LITERATURE, 3 hrs.**

***Current Course Description:*** Provide a survey of the masterpieces of string chamber literature in a historical and musical context. Includes listening assignments and examinations as well as class presentations.

***Prerequisites:*** 8 hours of lessons on string instruments.

***Proposed Course Title:*** CHAMBER MUSIC LITERATURE

***Proposed Course Description:*** Provide a survey of the masterpieces of chamber literature in a historical and musical context. Includes listening assignments and examinations as well as class presentations.

***Proposed Prerequisites:*** MUSC 2050 and MUSC 2055 or permission of instructor.

***Enforce in Banner:*** No

***Proposed Term:*** Fall 2017

**Action:** Approve

**WMST**

**4975 INDEPENDENT STUDIES, 1 to 4 hrs. (max. 4)**

***Current Course Description:*** Offers the advanced student the opportunity to pursue a topic of interest with the assistance and direction of an instructor in women's studies. Prerequisite: 6 hours in women's studies.

***Prerequisites:*** 6 hours in women's studies.

***Proposed Credit Hours:*** 1 to 4 hr. (Max. 9)

***Proposed Term:*** Fall 2017

**Action:** Approve

* ***College of Business***

**INBU**

**3110 GLOBAL BUSINESS ETHICS, 3 hrs.**

***Current Course Description:*** This course will provide students with fundamental grounding in business ethics and corporate social responsibility, including recent developments related to universal principles for ethical business practice. Students will gain tools for ethical decision making in the global context to maintain sustainable businesses for the 21st century.

***Prerequisites:*** Junior standing

***Proposed Prerequisites:*** Sophomore standing.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2017

**Action:** Approve

**MKT**

**3110 MARKETING ETHICS, 3 hrs.**

***Current Course Description:*** Examines ethics and social responsibility in marketing. With some grounding in moral reasoning, students explore application of ethical frameworks to various aspects of marketing, including marketing research, target market selection, and marketing mix decisions. Integrative models for incorporating ethics and social responsibility into marketing decision making are applied.

***Prerequisites:*** MKT 3210

***Proposed Course Description:*** This course examines ethics and social responsibility in marketing. With some grounding in moral reasoning, students explore application of ethical frameworks to various aspects of marketing, including marketing research, target market selection, and marketing mix decisions. Integrative models for incorporating ethics into marketing decision making are applied.

***Proposed Prerequisites:*** MKT 3210, sophomore standing.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2017

**Action:** Approve

**MKT**

**5890 ADVANCED PROBLEMS: MARKETING, 1 to 8 hrs. (max. 8)**

***Current Course Description:*** An arrangement whereby a student is permitted to develop some advanced phase of marketing not offered in formally structured courses, or to investigate a marketing problem. A written report is required.

***Prerequisites:*** 9 hours in marketing including one 5000-level course, written consent of instructor, accepted in a graduate program.

***Proposed Credit Hours:*** 3 hr.

***Proposed Course Number:*** MKT 5250

***Proposed Course Title:*** BEHAVIORAL THEORY I

***Proposed Course Description:*** Explore doctoral students to prospective outcomes on consumer behavior that draw from a variety of disciplines, including marketing, psychology, decision theory, sociology, and cultural anthropology. Students also learn about the different methods researchers employ to study consumers.

***Proposed Term:*** Fall 2017

**Action:** Approve

**MKT**

**5890 ADVANCED PROBLEMS: MARKETING, 1 to 8 hrs. (max. 8)**

***Current Course Description:*** An arrangement whereby a student is permitted to develop some advanced phase of marketing not offered in formally structured courses, or to investigate a marketing problem. A written report is required.

***Prerequisites:*** 9 hours in marketing including one 5000-level course, written consent of instructor, accepted in a graduate program.

***Proposed Credit Hours:*** 3 hr.

***Proposed Course Number:*** MKT 5280

***Proposed Course Title:*** BEHAVIORAL THEORY II

***Proposed Course Description:***  This seminar provides a sampling of consumer research rooted in psychological theories and frameworks. The historical development of consumer behavior in marketing, cognitive and related contributions to marketing thought development will be explored.

***Proposed Term:*** Fall 2017

**Action:** Approve

**MKT**

**5890 ADVANCED PROBLEMS: MARKETING, 1 to 8 hrs. (max. 8)**

***Current Course Description:*** An arrangement whereby a student is permitted to develop some advanced phase of marketing not offered in formally structured courses, or to investigate a marketing problem. A written report is required.

***Prerequisites:*** 9 hours in marketing including one 5000-level course, written consent of instructor, accepted in a graduate program.

***Proposed Credit Hours:*** 3 hr.

***Proposed Course Number:*** MKT 5350

***Proposed Course Title:*** MARKETING MODELS

***Proposed Course Description:***  Familiarizes students with quantitative modeling approaches to address a variety of marketing problems. The focus is on the nature, relevance, and properties of mathematical models and analytical methods that are employed to address various types of marketing decisions.

***Published Restriction:*** Accepted in graduate program.

***Proposed Term:*** Fall 2017

**Action:** Approve

**MKT**

**5890 ADVANCED PROBLEMS: MARKETING, 1 to 8 hrs. (max. 8)**

***Current Course Description:*** An arrangement whereby a student is permitted to develop some advanced phase of marketing not offered in formally structured courses, or to investigate a marketing problem. A written report is required.

***Prerequisites:*** 9 hours in marketing including one 5000-level course, written consent of instructor, accepted in a graduate program.

***Proposed Credit Hours:*** 3 hr.

***Proposed Course Number:*** MKT 5450

***Proposed Course Title:*** MARKETING THEORY I

***Proposed Course Description:***  The purpose of this class is to provide students with an in-depth understanding of the role and development of theory in marketing and related disciplines.

***Published Restriction:*** Accepted in graduate program.

***Proposed Term:*** Fall 2017

**Action:** Approve

* ***College of Engineering***

**ARE**

**3400 HEATING, VENTILATION, AND AIR CONDITIONING OF BUILDINGS, 3 hrs.**

***Current Course Description:*** Qualitative and quantitative study in concepts of basic air-conditioning with focus on buildings including building envelope, moist air thermodynamics, human comfort, thermal load calculations, thermal behavior of buildings, HVAC systems/equipment, and design of space air-conditioning and its relationship to architectural design. Cross listed with ME 3400.

***Prerequisites:*** ES 2310, ES 2330, and either ARE 2410 or ME 3360.

***Cross listed:*** ME 3400

***Proposed Prerequisites:*** ES 2310, ARE 2410 or ME 3360, ES 2330 or concurrent enrollment.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2016

**Action:** Approve

**ARE**

**4250 STRUCTURAL STEEL DESIGN, 3 hrs.**

***Current Course Description:*** Design of structural components and applications utilizing steel. Cross listed with CE 4250.

***Prerequisites:*** ARE/CE 4200 or concurrent enrollment.

***Dual listed/Cross listed:*** CE 4250

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

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CE**

**4350 DESIGN OF HYDRAULIC ENGINEERING, 3 hrs.**

***Current Course Description:*** For seniors and graduate students in civil engineering who desire to learn design of municipal water distribution and wastewater collection (storm and sanitary) systems by combining principles from hydraulics, hydrology and environmental engineering course work into an integrated design approach.

***Prerequisites:*** CE 3300

***Proposed Course Number:*** CE 4870 / CE 5870

***Proposed Course Title:*** WATER RESOURCE ENGINEERING

***Proposed Course Description:***  Study in water resource planning and design and problem solving applying engineering principles and procedures. Western United States water problems are emphasized, including user completion, reallocation, consumptive use, water development, conservation, conveyance losses, and return flows.

***Proposed Prerequisites:*** CE 3300

***Proposed Term:*** Spring 2017

**Action:** Approve

**CE**

**4820 GROUNDWATER AND DRAINAGE, 3 hrs.**

***Current Course Description:*** Principles and basic equations associated with saturated and unsaturated flow in soils describing groundwater and drainage flow will be developed. Design and analysis of surface and subsurface drainage systems will occur for steady and transient flow

***Prerequisites:*** ES 2330

***Proposed Course Number:*** CE 4810

***Proposed Course Title:*** GROUNDWATER HYDROLOGY

***Proposed Course Description:*** Principles and basic equations associated with saturated and unsaturated flow in soils describing groundwater and drainage flow. Laws governing the movement, recharge, and production of underground water with special emphasis on techniques and modeling methods for development of groundwater resources.

***Proposed Prerequisites:*** ES 2330

***Enforce in Banner:*** Yes

***Proposed Dual/Cross list:*** CE 5810

***Proposed Term:*** Spring 2017

**Action:** Approve

**CE**

**5260 PRESTRESSED CONCRETE DESIGN, 3 hrs.**

***Current Course Description:*** This is a classical course on prestressed and precast concrete. The subject focuses on the principles, behavior and performance of prestressed and precast concrete. Topics include flexure, shear, and axial load, construction and fabrication issues, and applications. The course complements CE 4260.

***Prerequisites:*** ARE/CE 4260

***Proposed Course Number:*** CE 5265

***Proposed Course Description:*** This is a classical course on designing prestressed and precast concrete systems. Principles and behavior of prestressed concrete build the foundation for topics that include flexure, shear, and axial lo ad, construction and fabrication, and application. The course continues with fundamental concepts taught in ARE/CE 4260. Dual listed with CE 5265. Offered on a three semester rotation.

***Prerequisite:*** ARE/CE 4260

***Enforce in Banner:*** Yes

***Dual/Cross Listing:*** CE 4265

***Proposed Term:*** Spring 2017

**Action:** Approve

**CE**

**5810 GROUNDWATER HYDROLOGY, 3 hrs.**

***Current Course Description:*** Laws governing the movement, recharge, and production of underground water with special emphasis on techniques and methods for analysis and modeling for development of groundwater resources.

***Prerequisites:*** CE 4800

***Proposed Course Description:*** Principles and basic equations associated with saturated and unsaturated flow in soils describing groundwater and drainage flow. Laws governing the movement, recharge, and production of underground water with special emphasis on techniques and modeling methods for development of groundwater resources. Prerequisite: CE 4800.

***Proposed Dual/Cross list:*** CE 4810

***Proposed Term:*** Spring 2017

**Action:** Approve

**CE**

**5870 WATER RESOURCE ENGINEERING, 3 hrs.**

***Current Course Description:*** Study in water resource planning and design and problem solving applying engineering principles and procedures. Western United States water problems are emphasized, including user completion, reallocation, consumptive use, water development, conservation, conveyance losses, and return flows.

***Prerequisites:*** CE 3300

***Proposed Course Description:*** Study in water resource planning and design and problem solving applying engineering principles and procedures. Western United States water problems are emphasized, including user completion, reallocation, consumptive use, water development, conservation, conveyance losses, and return flows.

***Proposed Dual/Cross list:*** CE 4870

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**2070 CHEMICAL THERMODYNAMICS I, 3 hrs.**

***Current Course Description:*** Discusses first and second laws of thermodynamics applied to chemical processes, production of power from heat, refrigeration, and liquefaction processes, develops thermodynamic relations for calculating thermodynamic properties of fluids, including the use of equations of state, and introduces heat effects, Gibbs-energy change of reaction, and chemical-reaction equilibria.

***Prerequisites:*** CHE 2005 Chemical Process Analysis (C or better), MATH 2210 Calculus III, and PHYS 1210 Engineering Physic. \*\*\*

***Proposed Prerequisites:*** C- or better in CHE 2005, PHYS 1210. C or better in MATH 2210.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**2080 CHEMICAL ENGINEERING FLUID MECHANICS, 3 hrs.**

***Current Course Description:*** Introduces the fundamental aspects of macroscopic fluid mechanics, including physical properties, fluid statics, mass, energy, and momentum balances, momentum transport, and flow through pumps, pipes, and other chemical engineering equipment for both incompressible and compressible fluids, and of microscopic fluid mechanics, including differential mass and momentum balances.

***Prerequisites:*** CHE 2005 Chemical Process Analysis (C or better), MATH 2210 Calculus III, MATH 2310 Applied Differential Equations I (concurrent), and PHYS 1210 Engineering Physic. \*\*\*

***Proposed Prerequisites:*** C- or better in CHE 2005, PHYS 1210, and C or better in MATH 2210. Concurrent with MATH 2310.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**3015 MULTICOMPONENT THERMODYNAMICS, 3 hrs.**

***Current Course Description:*** Introduces mixture properties, such as chemical potentials, excess properties, partial molar properties, heats of mixing, fugacities, and practical tools for estimating them from solution theories and equations of state. These tools and concepts are applied to phase and chemical equilibria. Cross listed with PETE 3015.

***Prerequisites:*** ES 2310, CHE 2060 or PETE 2060. (Normally offered fall semester)

***Cross list:*** PETE 3015.

***Proposed Prerequisites:*** C- or better in CHE 2060, & CHE 2070 or ES 2310.

***Enforce in Banner:*** Yes

***Proposed Dual/Cross list:*** No cross list

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**3026 HEAT TRANSFER, 3 hrs.**

***Current Course Description:*** Introduces the theory and application of energy transport (e.g. conduction, convection, radiation), discusses in depth fundamentals of microscopic energy transport, and applies the knowledge to macroscopic chemical engineering processes and systems.

***Prerequisites:*** CHE 2080 Chemical Engineering Fluid Mechanics or ES 2330 Fluid Dynamics. \*\*\*

***Proposed Prerequisites:*** C- or better in CHE 2060, & CHE 2080 or ES 2330.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**3028 MASS TRANSFER, 3 hrs.**

***Current Course Description:*** Introduces mass transfer concepts, including molecular diffusion, convective mass transfer, and mass transfer between phases, and the development of mathematical models of these physical phenomena, applicable to the analysis and design of chemical processes.

***Prerequisites:*** CHE 2080 Chemical Engineering Fluid Mechanics or ES 2330 Fluid Dynamics. \*\*\*

***Proposed Prerequisites:*** C- or better in CHE 2060, & CHE 2080 or ES 2330.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**3040 UNIT OPERATIONS LABORATORY I, 3 hrs.**

***Current Course Description:*** Illustrates fluid-flow and heat-transfer principles with experiments, for example, on pipe flow, fluid viscosity, and convective heat transfer. Emphasizes experimental-error analysis and technical communication, both written and oral. ***Prerequisites:*** WA/COM1, CHE 3025 with grades of C or higher (concurrent enrollment not allowed).

***Proposed Prerequisites:*** C- or better in CHE 3026, & CHE 3028 or ES 4060.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**3070 PROCESS SIMULATION & ECON, 3 hrs.**

***Current Course Description:*** Introduces the process simulation software used in the chemical industry and its applications, including examples of heat and material balances, physical properties, phase and chemical equilibria, equilibrium-stage separations and costs and profitability analysis.

***Prerequisites:*** Concurrent enrollment in CHE 3015 and CHE 3030.

***Proposed Prerequisites:*** C- or better in CHE 3015, & CHE 3026 & concurrent in CHE 3028.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**4050 UNIT OPERATIONS LAB, 3 hrs.**

***Current Course Description:*** Illustrates mass-transfer principles with experiments, for example, on extraction, gas absorption, and distillation. Emphasizes experiment planning and technical communication, both written and oral.

***Prerequisites:*** CHE 3030. (Normally offered spring semester).

***Proposed Prerequisites:*** C- or better in CHE 3040.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**4060 REACTION ENGINEERING, 3 hrs.**

***Current Course Description:*** Introduces chemical process kinetics, catalysis and reactor design. Includes homogeneous and heterogeneous reaction kinetics; design of batch, stirred-tank and tubular reactors; and nonisothermal operation.

***Prerequisites:*** CHE 3015 and 3025.

***Proposed Prerequisites:*** C- or better in CHE 3015 & CHE 3026 & Concurrent with CHE 3028.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**4070 PROCESS DESIGN I, 3 hrs.**

***Current Course Description:*** Encompasses engineering design of chemical processes. Introduces engineering economics, process safety management and environmental management.

***Prerequisites:*** CHE 3030, 3070 and 4060 or concurrent enrollment.

***Proposed Prerequisites:*** C- or better in CHE 3028 & CHE 3070 & CHE 4060.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**4080 PROCESS DESIGN II, 3 hr.**

***Current Course Description:*** Intended for the last semester of the senior year. Applies all previous courses to the design of safe, economical and environmentally benign chemical processes.

***Prerequisites:*** CHE 3040, 4070.

***Proposed Prerequisites:*** C- or better in CHE 4070 & COM 2.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**4090 PROCESS DYNAMICS AND CONTROL, 3 hr.**

***Current Course Description:*** Encompasses analysis and design control systems for the chemical process industry including steady-state approximation, types of controllers, simple unsteady-state analysis, use of mathematical models and process dynamics under control.

***Prerequisites:*** CHE 3025, 3030 and 4060.

***Proposed Prerequisites:*** C- or better in CHE 3028 & CHE 4060.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**CHE**

**4165 BIOMATERIALS, 3 hr.**

***Current 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.

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

***Cross listed/Dial listed:*** CHE 5165

***Proposed Prerequisites:*** LIFE 1010 and CHEM 1020 or CHEM 1050, or permission of instructor.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

**Action:** Approve

**ME**

**4060 SYSTEMS DESIGN I, 3 hr.**

***Current Course Description:*** First of a two-course design sequence constituting a capstone design experience. Student multidisciplinary teams prepare a project proposal or SOQ, generate a morphological study of their project and prepare project plans and specifications. Project management methods are also presented.

***Prerequisites:*** Completion of the ME Success Curriculum, ME 3010, ME 3170, and ME 3360.

***Proposed Prerequisites:*** Completion of the ME Success Curriculum, ME 3010 (or concurrent enrollment), ME 3170, and ME/ESE/ARE 3360.

***Proposed Term:*** Fall 2017

**Action:** Approve

**ME**

**4150 MECHANICAL BEHAVIOR OF MATERIALS, 3 hr.**

***Current Course Description:*** Commonly encountered phenomenological and mechanistic behaviors that lead to mechanical failure are examined. Understanding the origin of mechanical failure of components allows for robust design of mechanical systems. Metallic, polymeric, and ceramic materials are covered. Laboratory.

***Prerequisites:*** Completion of the ME Success Curriculum, ME 3450.

***Course Type:*** Lecture w/Lab***.***

***Proposed Course Description:*** Commonly encountered phenomenological and mechanistic behaviors that lead to mechanical failure are examined. Understanding the origin of mechanical failure of components allows for robust design of mechanical systems. Metallic, polymeric, and ceramic materials are covered.

***Proposed Course Type:*** Lecture only***.***

***Proposed Term:*** Fall 2017

**Action:** Approve

**PETE**

**3015 MULTICOMPONENT THERMODYNAMICS, 3 hr.**

***Current Course Description:*** Introduces mixture properties, such as chemical potentials, excess properties, partial molar properties, heats of mixing, fugacities, and practical tools for estimating them from solution theories and equations of state. These tools and concepts are applied to phase and chemical equilibria.

***Prerequisites:*** ES 2310 and concurrent enrollment in PETE 2060.

***Cross listed:*** CHE 3015

***Proposed Prerequisites:***  ES 2310 and concurrent enrollment in PETE 2060. Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**Action:** Approve

**PETE**

**3100 ROCK AND FLUIDS LAB, 3 hr.**

***Current Course Description:*** Examines use of material balance equation. Studies principles of fluid mechanics applied to single and multiphase flow of fluids in porous media and decline cure analysis.

***Prerequisites:*** C or better in CHE 2050.

***Proposed Prerequisites:***  C or better in CHE 2050. Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**Action:** Approve

**PETE**

**3200 RESERVOIR ENGINEERING, 3 hr.**

***Current Course Description:*** Provides understanding of principles of rock and fluid properties and their measurement as part of conventional and special core analysis, as well as PVT characteristics of reservoir fluids. Students are expected to understand how to measure important rock and fluid properties using laboratory equipment, as part of reservoir characterization routines, formation damage evaluations and well log calibration protocols. Students are also expected to learn how to write succinct and organized reports

***Prerequisites:*** C or better in CHE 2050.

***Proposed Prerequisites:***  C or better in CHE 2050. Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**PETE**

**3255 BASIC DRILL ENGINEERING, 3 hr.**

***Current Course Description:*** Principles and practices of oil and gas well rotary drilling, including rock mechanics, drilling hydraulics, drilling fluids, and hole deviation. Drilling equipment analysis, casing design, and drilling fluid properties. Application of modern computer-based analysis and design methods.

***Prerequisites:*** C or better in both ES 2310 and ES 2330.

***Proposed Prerequisites:***  C or better in CHE 2050. Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**Action:** Approve

**PETE**

**3265 DRILL FLUIDS LAB, 3 hr.**

***Current Course Description:*** Measurements of physical and chemical properties of drilling fluids. Includes experiments on mud rheological properties, mud weight, water loss, mud contaminants and their treatments. Includes processing and interpretation of data and writing technical reports of their work.

***Prerequisites:*** PETE 3255, C or better in both ES 2310 and ES 2330.

***Proposed Prerequisites:***  PETE 3255, C or better in both ES 2310 and ES 2330. Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**Action:** Approve

**PETE**

**3715 PRODUCTION ENGINEERING, 3 hr.**

***Current Course Description:*** Provides elements for design and analysis of surface production processes, including fluid separation, pumping and compression, measurement and treatment of production fluids, basic design of artificial lift system, and analysis and optimization of production systems.

***Prerequisites:*** C or better in (ES 2310, ES 2330 and PETE 2050).

***Proposed Prerequisites:***  C or better in (ES 2310, ES 2330 and PETE 2050). Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**Action:** Approve

**PETE**

**3725 WELL BORE OPERATIONS, 3 hr.**

***Current Course Description:*** Covers many facets of completion and intervention technology. The material progresses through each of the major design, diagnostic and intervention technologies, ending with effect of operations on surface facilities and finally plug and abandonment requirements.

***Prerequisites:*** C or better in both PETE 2050 and ES 2410.

***Proposed Prerequisites:***  C or better in both PETE 2050 and ES 2410. Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**Action:** Approve

**PETE**

**4225 WELL TEST ANALYSIS, 3 hr.**

***Current Course Description:*** Aims to present the fundamental concepts of well test analysis. The mathematical formulations presented are a critical facet of the methodology used in the interpretations. The formation gathered from the interpretation will help analyze, improve, and forecast the potential of the well and the reservoir.

***Prerequisites:*** PETE 3200.

***Proposed Prerequisites:***  PETE 3200. Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**Action:** Approve

**PETE**

**4320 WELL LOG INTERPRETATION, 3 hr.**

***Current Course Description:*** Studies use of various types of open hole logs for quantitative evaluation of formations.

***Prerequisites:*** C or better in PETE 2050.

***Proposed Prerequisites:***  C or better in PETE 2050. Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**Action:** Approve

**PETE**

**4340 PETROLEUM ECONOMICS, 3 hr.**

***Current Course Description:*** Applies principles of economics to petroleum properties. Studies taxation, present worth, rate of return, payout and decisions under uncertainty.

***Prerequisites:*** PETE 3200.

***Proposed Prerequisites:***  PETE 3200. Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**Action:** Approve

**PETE**

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

***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.

***Prerequisites:*** PETE 3200, PETE 3255, PETE 3715, PETE 3725, and C or better in COM 2.

***Proposed Prerequisites:***  PETE 3200, PETE 3255, PETE 3715, PETE 3725, and C or better in COM 2. Students must be a Petroleum Engineering major.

***Proposed Term:*** Fall 2017

**Action:** Approve

* ***College of Health Sciences***

**KIN**

**3021 PHYSIOLOGY OF EXERCISE, 4 hr.**

***Current Course Description:*** Applies physiological principles to human physical activities. Emphasizes interaction of neuromuscular, circulatory and respiratory mechanisms as affecting, and affected by, immediate exercise situation and physical training. Includes laboratory.

***Prerequisites:*** QA, KIN/ZOO 2040 and 3115

***Activity Type:***  Lecture w/Lab

***Dual listed:*** ZOO 3021

***Proposed Course Number:*** KIN 3021/ KIN 3022

***Proposed Activity Type:*** KIN 3021 Lectue / KIN 3022 Lab

***Proposed Credit Hours:*** KIN 3021 3 hrs. / KIN 3022 1 hr.

***Proposed Course Description*** KIN 3021***:*** Applies physiological principles to human physical activities. Emphasizes interaction of neuromuscular, circulatory and respiratory mechanisms as affecting, and affected by, immediate exercise situation and physical training.

***Proposed Course Description*** KIN 3022: An in-depth examination of the measurement of physiological principles and mechanisms related to human movement. Lab exercises emphasize skills necessary for basic morphological through advanced exercise performance testing variables. Laboratory writing exercises focus on improving students’ ability to read and comprehend scientific articles and produce scientific writing based on their own experiments and data.

***Proposed Prerequisites*** KIN 3022: KIN 3021 completed or concurrent enrollment.

***Proposed Term:*** Fall 2017

**Action:** Approve

**KIN**

**4900 TOPICS IN: PEDIATRIC EXERCISE PHYSIOLOGY, 1 to 3 hrs. (max. 9)**

***Current Course Description:*** This course will examine the physiological effects of acute and chronic exercise on the pregnant woman, fetus, child, and adolescent. This course is also suitable as a supplemental course for master’s students in physical education teaching.

***Prerequisites:*** KIN 3021

***Proposed Credit Hours:*** 3 hr.

***Proposed Course Number:*** NUMB 4010

***Proposed Course Title:*** PEDIATRIC EXERCISE PHYSIOLOGY

***Proposed Course Description:*** This course will examine the physiological effects of acute and chronic exercise on the pregnant woman, fetus, child, and adolescent. This course is also suitable as a supplemental course for master’s students in physical education teaching.

***Proposed Prerequisites:*** KIN 3021

***Enforce in Banner:*** Yes

***Proposed USP:*** None

***Proposed Term:*** Fall 2017

**Action:** Approve

* ***College of Education***

**EDCI**

**5790 ADVANCED INSTRUCTIONAL STRATEGIES, 3 hrs.**

***Current Course Description:*** Designed to allow graduate students and other educators to explore in depth the various instructional strategies that are available to them, research behind the development of these strategies, learning theories and the philosophy upon which they are based, curriculum standards that have encouraged their development, and assessment techniques that effectively measure student's learning.

***Prerequisites:*** graduate standing and classroom teaching experience.

***Proposed Course Title:*** LEARNING THEORIES & INSTRUCTIONAL PRINCIPLES.

***Proposed Course Description:*** This course focuses on making connections between theoretical perspectives on teaching and learning, empirical work, and the actual practice of teaching. As a result, learners should expect to examine multiple learning theories, read research based on these theories, explore pedagogy that grows out of these theories, and integrate theory into practice in their own classrooms.

***Proposed Prerequisites:*** Graduate level student.

***Enforce in Banner:*** Yes

***Proposed Term:*** Summer 2017

**Action:** Approve

* ***College of Law***

**LAW**

**6860 WATER RIGHTS, 3 hrs.**

***Current Course Description:*** Designed to allow graduate students and other educators to explore in depth the various instructional strategies that are available to them, research behind the development of these strategies, learning theories and the philosophy upon which they are based, curriculum standards that have encouraged their development, and assessment techniques that effectively measure student's learning.

***Prerequisites:*** None.

***Proposed Course Title:*** WATER RIGHTS & POLICY.

***Proposed Term:*** Summer 2017

**Action:** Approve

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

* ***College of Health Sciences***

**NURS**

**5590 PREPARATION FOR NON-THESIS, 1 hrs.**

***Course Description:*** Facilitates students in completing the preliminary work of topic identification that is necessary to move through the Non-Thesis clinical Scholarship Option (NURS5600) It provides the opportunity to identify and select a professional nursing problem of interest and to develop a prospectus for a clinical scholarship paper.

***Prerequisites:*** NURS 5010, 5025, and 5026; specialty courses within the MS program completed or concurrent enrollment.

***Proposed Term:*** Spring 2017

***Rationale:*** Program is discontinued. Prerequisites a re: NURS 5010, NURS 5025, NURS 5026, and at least two of the specialty course within the MS program completed. Students are encouraged to take this course the semester immediately preceding enrollment in NURS 5600.

**Action:** Approve

**NURS**

**5600 NON-THESIS SEMINAR, 1 to 4 hrs. (max 4)**

***Course Description:*** Designed to facilitate documentation of the outcomes of the masters program. In an interactive forum, students apply previously learned research, theory and practice skills to the rural advanced practice nursing role. Each student will develop a portfolio to document attainment of program outcomes.

***Prerequisites:*** NURS 5010, NURS 5025, NURS 5026, and at least two of the specialty courses within the MS program completed.

***Proposed Term:*** Spring 2017

***Rationale:*** Program is discontinued. Prerequisites are: NURS 5010, NURS 5025, NURS 5026, and at least two of the specialty courses within the MS program completed.

or consent of Instructor (required form on nursing web page).

**Action:** Approve

**NURS**

**5650 NON-THESIS CLINICAL PROJECT, 1 to 4 hr. (max 4)**

***Course Description:*** A non-thesis project involving independent student work focusing on developing, implementing and evaluating a clinical nursing project. The course contend is adapted to meet the specific focus of the student. A report must be written under the direction of a member of the graduate faculty in the School of Nursing. A non-thesis committee is composed of the chair, as director, one faculty member from the School of Nursing, and a member of the graduate faculty from another discipline.

***Prerequisites:*** Completion of NURS 5010, 5025 5026 and the majority of support courses or concurrent.

***Proposed Term:*** Spring 2017

***Rationale:*** Program is discontinued. Prerequisites are: Completion of NURS 5010, 5025 5026 and the majority of support courses or concurrent.

**Action:** Approve

**SOWK**

**1002 INTERNATIONAL COMM: THE PROCESS, 3 hrs.**

***Course Description:*** Provides and introduction to the purpose and philosophy of social work. Content focuses on various roles that social workers play, and the ethical dilemmas they encounter. Also provides an introduction to developing research questions in social work, and the problem solving method.

***Prerequisites:*** None

***Proposed Term:*** Fall 2017

***Rationale:*** This was a I and L course under USP 2003. The Division had two I and L courses; we plan on converting the other course (SOWK 1001) to a FYS in the future.

**Action:** Approve

**SOWK**

**5082 WOMEN & MENTAL HEALTH IN CONTE, 3 hrs.**

***Course Description:*** Examines the context of women's lives that contribute to actual or perceived emotional vulnerability and psychiatric diagnoses. Priority will be shifted from individual clinical pathology of women to a perspective of societal and patriarchal oppression.

***Prerequisites:*** Graduate standing.

***Proposed Term:*** Fall 2017

***Rationale:*** This elective course is no longer taught and was not a prerequisite for any other course.

**Action:** Approve

**SOWK**

**5950 INTERPERSONAL COUNSELING, 3 hrs.**

***Course Description:*** None

***Prerequisites:*** None

***Proposed Term:*** Fall 2017

***Rationale:*** This elective course is no longer taught and was not a prerequisite for any other course.

**Action:** Approve

**SOWK**

**4460 SOC WELFARE POLICIES & ISSUES, 3 hrs.**

***Course Description:*** Analyzes issues, programs and policies in social work and social welfare.

***Prerequisites:*** ECON 1010 with a C or better.

***Proposed Term:*** Fall 2017

***Rationale:*** Instead of changing the course description and title for our policy course a new course number was requested in a previous CARF. Resulting in this course SOWK 4460 and the new policy course SOWK 4850 Human Rights, Social Justice and Social Policy both showing up in the course catalog. We now teach the SOWK 4850 course in lieu of the SOWK 4460 course.

**Action:** Approve

* ***College of Engineering***

**ARE**

**4030 HISTORY OF GREEN BUILDING, 3hrs.**

***Course Description:*** Examines Green Building themes as practiced in the past and present. Areas of emphasis are: methods of heating, cooling and lighting in pre-modern buildings; the history of mechanical heating, cooling and lighting as related to architecture; and connections between exemplary contemporary buildings and historical examples.

***Prerequisites:*** ARE 2410 and 3030.

***Proposed Term:*** Spring 2017

***Rationale:*** In an effort to streamline our Architectural Engineering curriculum and to offer courses that align well with the teaching and research expertise in the department, this course no longer fits within the department's plans moving forward. It is also wortl1 noting that this class has not been offered since the fall of 2014 and there are no plans to offer it in the future.

**Action:** Approve

**ARE**

**4440 BUILDING ACOUSTICS, 3 hrs.**

***Course Description:*** A study of the acoustical environment of buildings, including basic theory with an emphasis on room acoustics and mechanical system noise and vibration. ***Prerequisites:*** ARE 3400 or concurrent enrollment.

***Proposed Term:*** Spring 2017

***Rationale:*** This course was developed and taught by a faculty member who is no longer at the University. In an effort to streamline our Architectural Engineering curriculum and to offer courses that align well with the teaching and research expertise in the department, this course no longer fits within the department's plans moving forward. It is also worth noting that this class has not been offered in many years and there are no plans to do so in the future.

**Action:** Approve

**ME**

**2005 WRITING FOR MECHANICAL ENGINEERS, 3 hrs.**

***Course Description:*** Develops writing styles and techniques, document design and formats, and audience/readership considerations that are specifically sutited to the mechanical engineering profession. The course concludes with a student-directed long-form report, and includes a significant oral presentation component.

***Prerequisites:*** successful completion of WA and sophomore standing in Mechanical Engineering.

***Proposed Term:*** Fall 2017

***Rationale:*** ENGL 2005 Technical Writing has replaced the requirement of ME 2005 Writing for Mechanical Engineers in our curriculum. ME 2005 is no longer taught, and needs to be discontinued.

**Action:** Approve

**Blanket discontinuation of multiple ATSC 3000 and 4000 courses.**

**ATSC**

**3032 WEATHER ANALYSIS AND FORECASTING**

**ATSC**

**4001 MODELING IN EARTH SYSTEM**

***Cross listed*: BOT/GEOL/ESS 4001.**

**ATSC**

**4007 PROBLEM IN SYNOPTIC METEOROLOGY**

***Dual listed*: ATSC 5007**

**ATSC**

**4008 MESOSCALE METEOROLOGY**

***Dual listed*: ATSC 5008**

**ATSC**

**4031 ATMOSPHERIC DYNAMICS**

**ATSC**

**4033 ATMOSPHERE REMOTE SENSING**

**ATSC**

**4035 ATMOSPHERE PROCESS II**

**ATSC**

**4160 SYNOPTIC METEOROLOGY**

***Dual listed*: ATSC 5160**

**ATSC**

**4400 THE PHYSICAL BASIS OF CLIMATE**

**ATSC**

**4410 INTRODUCTION TO MICROMETEOROLOGY**

***Proposed Term for all Previously Listed:*** Spring 2017

***Rationale for all Previously Listed:*** The Department of Atmospheric Science is no longer part of the undergraduate Earth System Science (ESS) and Physics-Plus programs (PP). The faculty of Atmospheric Science voted earlier to withdraw from both programs. Several 3000- and 4000-level classes will remain on the Atmospheric Science.

The interdisciplinary undergraduate ESS program started in 2005, with seven departments: Botany, Geology, Geography, Anthropology, Soil Science, Secondary Education, and Atmospheric Science. After continued low enrollment in ESS in all departments, Atmospheric Science voted to withdraw from the program in 2013. ESS itself was absorbed into the SENR program in 2014.

Similarly, Atmospheric Science offered a concentration in Physics Plus starting in 1999, but also because of low enrollment decided to withdraw. Atmospheric Science remains active in undergraduate teaching, with strong enrollments in 2000 and 2100; 4010 and 4320 help meet course needs of other majors. Several other undergraduate courses are being considered.

**Action:** Approve

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

* ***College of Agriculture***

**REWM**

**1070 WORLD WATER QUALITY, 3 hr.**

***Proposed Course Description:*** This course covers global water resources, fresh water demands, water quality issues, and water resources management on a watershed scale. Students become more knowledgeable about significanceof availability and sustainability of water resources and water quality.

***Prerequisite:*** None requested

***Enforce in Banner:*** No

***Proposed Term:*** Fall 2017

***Rationale:*** This is a new course designed for first and second year students who are interested in the natural world. This course is intended to fill a teaching gap at the University, namely an introductory-level course to water science. The University has several upper division courses related to hydrology and water resources, and this course will introduce students to water science early in their academic careers and serve as a foundation science course for both science and non-science majors. The course material is highly relevant to today's interconnected world and for understanding the importance of water resources in the US and around the world. Water is both a limiting factor and one of the primary drivers for economic growth and ecological stability and the principles of water quality serve as an excellent vehicle for informing students of the scientific method, advancing their understanding and appreciation of scientific skills and engaging critical thinking skills.

**Action:** Approve

**RNEW**

**1000 WYOMING WILDLANDS: SCIENCE AND STEWARDSHIP, 3 hr.**

***Proposed Course Description:*** Introduces students to the breadth of Wyoming natural resources and ecosystems. In this class we investigate the science and management of the Wyoming landscape. Students are introduced to the rangelands, wildlife, forests, watersheds, and disturbed lands of Wyoming with an emphasis on understanding the ecology and natural history of the region. Throughout the course, students are exposed to how the extensive ecosystems of the West are managed by public and private groups and how human decisions change the landscape.

***Prerequisite:*** None requested

***Enforce in Banner:*** No

***Proposed USP:*** PN

***Dual/Cross Listing:*** CLAS X33X

***Proposed Term:*** Fall 2017

***Rationale:*** This is a new introductory level course covering ecosystem science and management, team taught by instructors from ESM covering their disciplinary areas. This survey course of key science topics in Wyoming ecosystems is designed as a PN course that introduces students to the science behind ecosystem health and stability and how management decisions are informed by science and affect natural resources. There are no introductory level courses like this at the University, and the course focuses on an area central to Wyoming: its extensive natural resources and how research and management of water, soils, wildlife, and rangelands are driven by science to improve ecosystem health and human impacts.

**Action:** Approve

* ***College of Arts & Science***

**ANTH**

**3410 MAYA, AZTEC, AND INCA CULTURES, 3 hrs.**

***Proposed Course Description:*** This course is an exploration of the early states and empires of the New World through the archaeological record. It compares and contrasts the Aztec, Maya and Inca cultures with emphasis placed on origins, political and social organization, ritual beliefs, and reasons for collapse.

***Prerequisite:*** ANTH 1300

***Enforce in Banner:*** No

***Proposed Term:*** Fall 2017

***Rationale:*** Anthropology wishes to offer a detailed 3000 level course in the complex societies, early states, and empires of the new world. This is a course with subject matter not offered in any other Anthropology course at UW and therefor will significantly broaden the courses offered in the department.

**Action:** Approve

**ANTH**

**4145 ORIGINS OF THE STATE, 3 hrs.**

***Proposed Course Description:*** This course takes a comparative approach to the study of the origins of the archaic states. Focus is given to themes in complexity such as emergence of social economic inequality, private property, power, ideology, and urbanism. Comparative civilizations/regions include early China, Mesopotamia, Egypt, Central Mexico, and Peru.

***Prerequisite:*** ANTH 1300

***Enforce in Banner:*** Yes

***Dual/Cross Listing:*** ANTH5145

***Proposed Term:*** Fall 2017

***Rationale:*** The Department of Anthropology wishes to offer a theoretically rigorous course addressing the theories or the origins of the archaic state at the 4000/5000 levels. This is a new course in the department and adds theoretical breadth to Anthropology’s offerings.

**Action:** Approve

**ANTH**

**4175 SOUTH AMERICAN PREHISTORY, 3 hrs.**

***Proposed Course Description:*** This is an intensive study of the archaeology of South America covering its entire prehistory from 1st peopling at perhaps 14,000 years ago, to the colonial period. The course focuses not only on the well known Andean cultures, but also on the archaeology of the entire continent.

***Prerequisite:*** ANTH 1300

***Enforce in Banner:*** Yes

***Dual/Cross Listing:*** ANTH 5175

***Proposed Term:*** Spring 2017

***Rationale:*** Anthropology wishes to offer an intensive course on the prehistory of South America, from the 1st peopling of the continent to the colonial period. This course will add important regional and temporal breadth to the department, which otherwise offers regional courses emphasizing North America. This course will be most effective when offered at the 4000/5000 levels.

**Action:** Approve

**ENGL**

**2015 COLLEGE COMPOSITION AND RHETORIC II: COLLEGE AND**

**CAREER, 3 hrs.**

***Proposed Course Description:*** ENGL2015 helps students become stronger writers, speakers, and thinkers, and features assignments that explore issues that pertain to students’ majors and future careers. Students will engage in different genres for a range of audiences, revise substantially, and practice critical thinking in academic, civic, and professional contexts.

***Prerequisite:*** ENGL/Synergy 1010 (COM1)

***Enforce in Banner:*** Yes

***Proposed USP:*** COM 2

***Proposed Term:*** Spring 2016

***Rationale:*** None provided.

**Action:** Approve

* ***College of Education***

**EDCI**

**5090 PLAN B RESEARCH, variable hrs. (Max. 9)**

***Proposed Course Description:*** Under the guidance of a committee chair, the enrolled graduate student will complete a scholarly Plan B project. Plan B projects emerge from practice, typically involving a problem of interest within a student’s school, classroom, or work site.

***Prerequisite:*** Graduate level student.

***Enforce in Banner:*** Yes

***Activity type:***  Independent Study

***Grading System:*** S/U

***Published Restriction:*** Admission in C&I Graduate Program.

***Proposed Term:*** Summer 2017

***Rationale:*** To make our Plan B (non-thesis) Master's course more recognizable on transcripts and consistent with other College of Education Departments.

**Action:** Approve

**EDCI**

**5730 LEARNING AND COGNITION, 3 hrs.**

***Proposed Course Description:*** The purpose of this course is to explore and critically analyze various learning theories fro1900 to present, including, but no limited to, behaviorism, constructivism, information processing, situated cognition, meaning learning, and cognitivism. Focus is on applying learning theories to impact K-12 student outcomes.

***Prerequisite:*** Graduate level student.

***Enforce in Banner:*** Yes

***Published Restriction:*** Graduate standing or permission of instructor.

***Proposed Term:*** Fall 2017

***Rationale:*** The course is a core requirement for EdD students in Curriculum and Instruction program as well as a key elective for PhD students whose emphasis is in Curriculum Studies. The course is currently being taught with the temporary designation EDCI 5870.

**Action:** Approve

* ***College of Engineering***

**CE**

**4265 PRESTRESSED CONCRETE DESIGN, 3 hrs.**

***Proposed Course Description:*** This is a classical course on designing prestressed and precast concrete systems. Principles and behavior of prestressed concrete build the foundation for topics that include flexure, shear, and axial lo ad, construction and fabrication, and application. The course continues with fundamental concepts taught in ARE/CE 4260. Dual listed with CE 5265. Offered on a three semester rotation..

***Prerequisite:*** ARE/CE 4260

***Enforce in Banner:*** Yes

***Dual/Cross Listing:*** CE 5265

***Proposed Term:*** Spring 2017

***Rationale:*** In an effort to streamline course offerings, the CAE department is seeking to create an undergraduate course in prestressed concrete which can then be cross-listed with the graduate course currently offered.

**Action:** Approve

**CE**

**4965 UNDERGRADUATE RESEARCH, 1 to 3 hrs. (max. 3)**

***Proposed Course Description:*** Research activities on a relevant project of limited scope or as part of a laboratory project of greater scope under the advisement of a faculty member or mentor. The normal workload for 3 credits is considered to be 9 hours per week. Students will present at Undergraduate Research Day. Prerequisite: Consent of the department head.

***Prerequisite:*** Consent of the department head.

***Enforce in Banner:*** Yes

***Proposed Term:*** Spring 2017

***Rationale:*** All departments in the College of Engineering and Applied Science have been asked to create a course where undergraduate students can earn credit while working on a research project under the supervision of a faculty member or mentor. By creating this course, the CAE Department will be in compliance with this request.

**Action:** Tabled to clarify prerequisite.

**CHE**

**3100 FUNDAMENTALS OF BIOENGINEERING, 3 hrs.**

***Proposed Course Description:*** An introduction to select biological concepts with emphasis on their relevancy to bioengineering. Topics include model organisms, cells and organelles, bioenergetics and metabolism, macromolecules, DNA replication and modern molecular biology methods, and control mechanisms.

***Prerequisite:*** C- or better in LIFE1010 for CHE3100

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2017

***Rationale:*** This course introduces concepts in biology that are required knowledge for the Bioengineering courses offered by the Chemical Engineering department. This course is being created to introduce essential engineering-related biological concepts, including topics from microbiology, molecular biology, cell biology, biochemistry, and genetics, in a manner that stresses the importance of these concepts for bioengineering. Students should take this course before taking other bioengineering courses offered by the Chemical Engineering department.

**Action:** Approve

**CHE**

**4220 METABOLIC & PROTEIN ENG, 3 hrs.**

***Proposed Course Description:*** An introduction to the design of biological systems for conversion of a feedstock to product, with emphasis on synthetic biology and directed evolution design principles, evolutionary mechanisms and tradeoffs. Metabolic pathways and molecules of industrial importance will be discussed, as well as ethics as applied to synthetic biology and bioengineering.

***Prerequisite:*** C- or better in LIFE1010 for CHE4220

***Enforce in Banner:*** Yes/No

***Dual/Cross Listing:*** CHE 5220

***Proposed Term:*** Spring 2017

***Rationale:*** This course introduces concepts central to the engineering of metabolic pathways and proteins for the production of value-added fuels and chemicals. Current state-of-the-art techniques related to metabolic and protein engineering will also be discussed, so students understand benefits and drawbacks of techniques of these biological techniques when incorporating them into processes. Students will be expected to understand and design basic metabolic and protein engineering schemes, with the overall goal of using bioengineering to produce value-added products from a feedstock. Ethics related to metabolic and protein engineering will also be discussed. This material is not currently covered in any of the offered bioengineering courses and is relevant for current bioengineering graduates.

**Action:** Tabled to clarify prerequisite.

**PETE**

**4850 SHALE RESERVOIR DEVELOPMENT, 3 hrs.**

***Proposed Course Description:*** This course provides an overview of the geoscience and engineering aspects involved in the exploration and development of shale reservoirs. Topics covered include Organic Geochemistry, Geomechanics, Petrophysics, Geophysics, Reservoir and Completion Engineering, and Drilling. The primary phases involved in obtaining hydrocarbon production from shale reservoirs are detailed.

***Prerequisite:*** C or better in both PETE 2050 and PETE 3200

***Enforce in Banner:*** Yes

***Proposed Term:***  Spring 2017

***Rationale:*** This is a new course which is taught for the first time during Fall 2015 under the Special Topics designation of PETE 4990. This course had a significant number of participants during the fall (47, include graduate students) and currently has 16 students enrolled during the Spring 2016 semester. The department would like to switch the course’s “Special Topics” designation to a regular course number and offer this course on a regular basis.

**Action:** Approve

* ***College of Health Sciences***

**PHCY**

**6052 GERIATRIC PHARMACOTHERAPY, 1 hrs.**

***Proposed Course Description:*** This course is designed to develop the student’s knowledge and understanding of geriatric pharmacotherapy through discussion of medical literature, case discussion, and providing patient care under supervision of the faculty member. Emphasis of the course is on class discussion and case-based learning.

***Prerequisite:*** Enrollment in professional PharmD program, P3 staUS.

***Enforce in Banner:*** Yes

***Proposed Term:*** Fall 2017

***Rationale:*** This is a course that has been taught as an elective seminar course (PHCY 4170). It has become so popular that the School of Pharmacy would like to give it a PHCY course number as a stand-alone course.

**Action:** Approve

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

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

**ART**

**1101 FYS: BUILDING YOUR OWN CAMERA: ALTERNATIVE METHODS OF PHOTOGRAPHY, 3 hrs.**

***Proposed Course Description:*** What is a camera and how do you create a photograph? This class will look to question your assumptions about these as we learn how cameras function, what the bare necessities are to have one and how many different methods there are to create photographic imagery. We will explore room sized camera obscuras, tiny home made pinholes and other lens-less and camera-less methods of photography all while looking through the mediums history and reading discussions on it’s place in the world.

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

***Enforce in Banner:*** Yes

***Proposed Term:***  Spring 2017

***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

**ANTH**

**1101 FYS: HOAXES, MYTHS, AND CHARLATANS IN ARCHAEOLOGY, 3 hrs.**

***Proposed Course Description:***  This course examines the use and misuse of the past by charlatans, fanatics, and politicians. We examine the scientific method in archaeology and then delve into the use of pseudoscience and pseudoarchaeology. Important themes explored include extraterrestrial contact in the past, the archaeology of giants and other hoaxes, the mysteries of the early Americas, the great pyramids, and the misuse of archaeology and the past for political purposes. Students will come away with a grasp of the scientific method, a broad understanding of scientific archaeology and how it has been used by some to perpetuate a wide range of mythical, political and racist beliefs. Students will learn to access, analyze, and critically evaluate various forms of data and evidence. The course will take the format of a seminar discussion, consisting of focused discussion of readings and other media, as well as student presentations. Sources utilized will include primary and secondary academic writings, folklore, film, and the internet.

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

***Enforce in Banner:*** Yes

***Proposed Term:***  Spring 2017

***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

**ENGL**

**1101 FYS: FILM GENRE STUDY, 3 hrs.**

***Proposed Course Description:***  This course will examine a number of films through the classification tool of genre. Genre, in its traditional sense, designates a kind or type of film that can usually be recognized with such common labels as western, gangster, horror, science fiction, musical, romance, etc. This understanding of the term genre immediately exemplifies its usefulness for categorizing films into specific groups, potentially satisfying particular viewer's expectations. Such overarching film genres, such as those listed above, are often thought in terms of static, unchanging conventional forms that continually apply a particular formula for a familiar result. Such an understanding of film genres does little to suggest how and why these groups are formed, and what might account for a particular genre's success in a particular historical moment. This class will look at four relatively distinct genres of American film (Western, comic superhero, screwball/romantic comedy, true story) in order to understand how film genres come about. This exploration will hopefully lead to questions about the role of genre films in marketing, selling, sustaining, and reinvigorating particular kinds or types of films. Genre is first and foremost a classifying structure, yet we will try and examine how this seemingly static structure depends upon rupture and deviation in order to keep film genres in circulation for any prolonged period of time. Finally, we will attempt to suggest how newer cycles of films (slasher films, b movies, cult films, the woman's film, etc.) might use a different criteria to decide what constitutes a genre film, hence casting doubt on any entirely stable, universal definition of generic formations.

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

***Enforce in Banner:*** Yes/No

***Proposed Term:***  Fall 2017

***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

**ENGL**

**1101 FYS: CONCEPTUALIZING ADULTHOOD AND ADOLESCENCE IN 21ST CENTURY, 3 hrs.**

***Proposed Course Description:***  This class asks students to critically examine what it means to be an adult in the 21stcentury in America. This course will ask the following questions: How is adulthood marked and/or celebrated? What defines adulthood and how might these definitions differ when one considers gender, race, sexuality, socioeconomic status, etc.? Currently, young people (those in their late teens through their late twenties (and even early thirties)) are often accused of having an extended adolescence. The reasons for this prolonged process of maturation have been linked to parental influence, affluence, rising cost of college tuition, the decline in service-based jobs, etc. Or perhaps, the very idea of extended adolescence is merely a myth. Perhaps those facing adulthood are reshaping the very definition of what it means to be “grown up” in innovative and meaningful ways.

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

***Enforce in Banner:*** Yes/No

***Proposed Term:***  Fall 2017

***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

**ENGL**

**1101 FYS: VIDEO GAME THEORY, 3 hrs.**

***Proposed Course Description:***  In this class, we will use video games not only as objects of entertainment but also as objects of instruction, objects of cultural value, and objects of human production, distribution, and consumption.

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

***Enforce in Banner:*** Yes/No

***Proposed Term:***  Fall 2017

***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