

Approved February 16, 2012.

**COLLEGE OF ARTS AND SCIENCES
GRADUATE STUDIES COMMITTEE**

Meeting #4
Thursday, February 9, 2012 at 1:30 p.m.
in 217 Varner Hall

MINUTES

Present: C. Cheng, S. Dykstra, G. Milne, K. Moore, K. Nielsen, T. Shackelford

1. Committee approved Minutes #3, January 26, 2012.
2. Committee approved the request from the Department of Biological Sciences to make the following changes to catalog copy:

Doctor of Philosophy in Biomedical Sciences: Biological Communication

Course requirements

a. Core requirements

Under first bullet item, **change** BIO 563 to *BIO 513*.

Preliminary examination

Change medical physics in first paragraph to *biological communication*.

Master of Arts in Biology

Change November deadlines to *November 1*.

Course requirements

a. General requirements

Change to:

1. Cellular/molecular biology track

Students must choose a minimum of three courses from:

- BIO 511*, Advanced Topics in Cellular Biochemistry and Metabolism (4 credits)
- *BIO 513*, Advanced Topics in Cell Physiology (4 credits)*
- BIO 515*, Mechanisms of Development (4 credits)
- BIO 517*, Molecular *Biology* (4 credits)

*or their equivalents as approved by the chair of the Graduate Committee.

Master of Science in Biology

Change November deadlines to *November 1*.

Course requirements

a. General requirements

Change to:

1. Cellular/Molecular Biology Track (32 credits)

- BIO 511*, Advanced Topics in Cellular Biochemistry and Metabolism (4 credits)
- BIO 513*, Advanced Topics in Cell Physiology (4 credits)
- BIO 515*, Mechanisms of Development (4 credits)
- BIO 517*, Molecular *Biology* (4 credits)
- BIO 690, Graduate Research (at least 8 credits)
- Electives, (0-7 credits)
- BIO 691, Thesis Seminar (1 credit)

Graduate Certificate in Biomedical Sciences

Course requirements (16 credits)

Change to:

Four of the courses in the following list:

- BIO 509, Endocrinology (4 credits)
- BIO 511, Advanced Topics in Cellular Biochemistry and Metabolism (4 credits)
- BIO 513, Advanced Topics in Cell Physiology (4 credits)
- BIO 515, Mechanisms of Development (4 credits)
- *BIO 517, Molecular Biology (4 credits)*
- BIO 519, Advanced Genetics (4 credits)
- BIO 521, Medical Microbiology (4 credits)
- BIO 523, Immunology (4 credits)
- or other 500-level BIO course if approved by the Biology Graduate Committee.

Transfer to the Master of Arts in biology (MA) or Master of Science in biology (MS) degree program

Change excluding to *including* in the first paragraph as follows:

They must meet all the admission requirements for the MA or MS degree program, *including...*

Change 12 to 16 credits in the last paragraph.

3. Committee approved the request from the Department of Chemistry to **add new courses:**

ENV 580 Biogeochemical Cycling (3)

Nutrient cycle, environmental contamination, remediation, sustainable agriculture, land use and management. ENV 580 is cross-listed with ENV 480. Students cannot receive credit for both courses.

ENV 585 Environmental Fate and Transport (3)

Distribution and transformation of chemical pollutants in air, water and soil. Topics include chemical equilibrium and mass transport processes, biotic and abiotic transformations, hydrology, and physiochemical properties of chemical pollutants that affect transport, accumulation and degradation. ENV 585 is cross-listed with ENV 485. Students cannot receive credit for both courses.

ENV 586 Toxic Substance Control (3)

Quantification and management of toxic substances, including production, use, distribution, exposure and control. Risk assessment and regulatory strategies will be emphasized. ENV 586 is cross-listed with ENV 486. Students cannot receive credit for both courses.

ENV 587 Natural Resource Management (3)
Natural resources management: exploration, exploitation, contamination and remediation
Oil, gas and metallic ore exploration and exploitation. Contamination issues and remediation
strategies. Special emphasis on real data analysis. Students will produce and present a
comprehensive management plan production based on these data. ENV 587 is cross-listed with ENV
487. Students cannot receive credit for both courses.

4. Committee approved request from the Department of Chemistry to make the following changes to catalog copy:

Doctor of Philosophy in Biomedical Sciences: Health and Environmental Chemistry

Environmental Science course (3 credits)

ENV 585, Environmental Fate and Transport

ENV 586, Toxic Substance Control

Master of Science in Chemistry

Environmental Science course (3 credits)

ENV 585, Environmental Fate and Transport

ENV 586, Toxic Substance Control

5. Committee approved the request from the Department of Political Science to make the following changes to catalog copy:
 - a. **Add** PA 634, Risk Management to the Criminal Justice Leadership concentration under the MPA program.
 - b. **Change** the number of concentrations from 4 to 5 to add Court Administration.
 - c. **Add** the Court Administration Concentration approved on October 10, 2011.
6. Committee approved the request from the Department of History to **add** a new course:
7. Committee deferred the request from the Department of History to **add** a Graduate Certificate in World and Transnational History.
8. Committee approved the request from the Department of Linguistics to **add** a new course:

LIN 550 Linguistic Typology (4)

Investigates patterns of variation in the world's languages. These patterns lead to an understanding and explanation of linguistic universals that provide insight into the complexity of the human language faculty.

9. Committee approved the request from the Department of Psychology to **add** the following new courses:

PSY 511 Advanced Statistics for Psychological and Behavioral Research I (4)
Advanced statistical techniques for analyses of quantitative psychological and behavioral science data. Topics investigated include normality check, reliability analysis, multiple regression, and factor analysis. Students are expected to use statistical software, take an active role in data exploration, and present their findings, discussing results in the context of theoretical and empirical literature.
Prerequisite: permission of instructor.

PSY 512 **Advanced Statistics for Psychological and Behavioral Research II** (4)
Advanced statistical techniques for analyses of longitudinal and cross-sectional, parametric and non-parametric and qualitative psychological and behavioral science data. Topics investigated include ANCOVA, repeated-measures ANOVA, mixed design ANOVA, MANOVA, and path analysis. Students are expected to use statistical software, take an active role in data exploration, and present their findings, discussing results in the context of theoretical and empirical literature.
Prerequisite: PSY 511.

PSY 701 Advanced Topics in Methods of Psychological and Behavioral Research Design (4)
Intensive examination of design and methodological issues specific to advanced research problems in psychological science.

PSY 721 Advanced Topics in Biological and Basic Processes (4)
Intensive examination of advanced theoretical and research issues related to biological and basic processes.
Prerequisite: permission of instructor.

PSY 731 Advanced Topics in Social and Behavioral Processes (4)
Intensive examination of advanced theoretical and research issues related to social and behavioral processes.
Prerequisite: permission of instructor.

10. Committee deferred the request from the Department of Psychology to **add** the following new courses:

PSY 595 Teaching Psychological Science (4)
Basic components of successful teaching, with opportunities to develop pedagogy and practice teaching skills. Skills include developing a syllabus, methods of presenting content and enhancing student learning, classroom management and assessing student performance.
Prerequisites: PSY 502, 512, 521, 531.

PSY 621 Cognitive Psychology: Theory and Application (4)
Mental representation and transformation, imagery, attention, memory, language processing, concept formation, problem solving, decision-making. Content is discussed in terms of how research into cognitive phenomena informs theory formation and development and translation into practical applications.
Prerequisites: PSY 502, 512, 521.

PSY 622 Animal Cognition (4)
Theories and research related to classic and current studies of non-human cognition. Topics include theory of mind, causal reasoning, memory, meta-cognition, self-recognition, tool use, planning, cooperation, and social learning. Research discussed covers a range of species including birds, cetaceans, carnivores and primates.
Prerequisites: PSY 502, 512, 521.

- PSY 623 Human Vision (4)
In-depth study of the behavioral science of human vision. Topics include signal detection theory, speed of perceptual processes, color vision, form perception, as well as cognitive and unconscious influences on complex visual processes.
Prerequisites: PSY 502, 512, 521.
- PSY 625 Conditioning, Learning and Memory (4)
Major theories of human and animal learning, including classical and instrumental conditioning paradigms, cognitive and observational learning theories, and models of memory. Content is discussed in terms of both theory and practical applications.
Prerequisites: PSY 502, 512, 521.
- PSY 633 Life-span Development Theories and Research (4)
Empirical issues and theoretical approaches relevant to life-span development, emphasizing historical and contemporary perspectives. Theories include Piaget's theory of cognitive development, information-processing theories, domain-specific theories of cognitive development, attachment theory, dynamic systems theory, ecological theory, socio-emotional selectivity theory, resilient aging, and functional neuro-aging.
Prerequisites: PSY 502, 512, 531.
- PSY 634 Individuals and Communities (4)
Relationship of the individual to the community including the theories, principles, values and research methods of community psychology.
Prerequisites: PSY 502, 512, 531.
- PSY 635 Analysis of Psychopathology (4)
Theoretical and empirical contributions to the understanding of the etiology and maintenance of abnormal behavior. Topics include empirical methods for understanding the processes and mechanisms involved in various deviations from healthy behavior.
Prerequisites: PSY 502, 512, 531.
- PSY 651 Biopsychosocial Factors of Health and Wellness (4) Interactions
among biological, psychological, and socio-cultural predictors of health and wellness. Topics include the application of theories of behavior change to health habits; the role of personality, emotions, stress, and coping on health and adjustment to illness; and health disparities associated with ethnicity, class, gender, and age.
Prerequisites: PSY 502, 512, 521, 531.
- PSY 653 Culture and Trauma (4)
Theoretical perspectives and empirical research on cross-cultural similarities and differences in trauma experiences. Topics include the universal and culture-specific aspects of trauma, coping strategies, social support, PTSD, and posttraumatic growth.
Prerequisites: PSY 502, 512, 521, 531.
- PSY 654 Emotion and Motivation (4)
Major theories, research findings, methods and applications reflecting diverse perspectives to the issue of human and non-human motivation, including social and behavioral as well as biological and neurophysiological approaches. Topics include social function, health, adjustment, feeding, and reproduction.
Prerequisites: PSY 502, 512, 521, 531.
- PSY 655 Personality, Individual Differences, and Intelligence (4)
Theoretical perspectives and empirical research on individual differences in personality, including the causes and consequences of individual differences in the major dimensions of personality, as well as the causes, consequences, and assessment of individual differences in intelligence.
Prerequisites: PSY 502, 512, 521, 531.

PSY 656 Biopsychosocial Mediation of Creativity (4)
Manner in which creativity is affected by culture, society, personality, cognition, and biology.
Contemporary theories about creativity and the research supporting those theories are discussed and evaluated with the goal of empirically examining creativity and/or applying that knowledge to enhance creativity.
Prerequisites: PSY 502, 512, 521, 531.

PSY 657 Hormones and Human Behavior (4)
Discusses impact that hormonal profiles have on behavior and how these influences may be adaptive. Topics will include menstrual cycle effects, human mating, parenting, preferences for cues of kinship, competition, and psychosexual differentiation of behavior.
Prerequisites: PSY 502, 512, 521, 531.

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