



To: Members of the 2019-2020 Graduate Council

From: Colleen Mouw, Chair
Nasser Zawia, Dean
Brenton DeBoef, Associate Dean

Date: 27 January 2020

RE: Agenda for Meeting Number 528 of the Graduate Council to be held on Monday, 27 January 2020 at 2:00 p.m. in the Ballentine Hall Thomson Boardroom.

I. Call to order

II. Approval of Minutes of Meeting Number 527, 2 December 2019 (please see attachments)

III. Announcements

- A. Graduate Faculty Summit 'Best Practices & New Programs at URI' - Date TBD (*DeBoef*)
- B. Professional Development Upcoming Events (*Mitnick*)
- C. Graduate Faculty Status Letter to the President (*Zawia*)
- D. Recent appointments to the Graduate Faculty since those listed on 2 December 2019 meeting agenda (*DeBoef*)

Matthew Goodwin, Adjunct Professor, Department of Psychology

Stefanie Boyer, Adjunct Professor, College of Business

Jamie Reaser, Adjunct Professor, Department of Natural Resource Science

Bing Mu, Assistant Professor, Department of Modern and Classical Languages and Literatures

IV. New Business

- A. Transcript annotations for thesis and non-thesis MS degrees (*DeBoef*)
- B. Procedure for processing new ABM proposals. (*DeBoef*)
- C. Admissions requirements for online certificates for international students residing abroad (*Mosley-Austin*)

V. Graduate Curriculum (See Google Drive for Course forms) (*DeBoef*)

400-Level Course Changes

COLLEGE OF ARTS & SCIENCES

CSF 410 Digital Forensics I

The science, technology, procedures, and law of acquiring and analyzing digital evidence from computers and devices. *4 credits*

Changing prerequisite.

CSF 430 Introduction to Information Assurance

Fundamental concepts to understand threats to security; various defenses against those threats. Planning for security; technology used to defend computer systems; implementing security measures and technology. 4 credits

Changing prerequisite.

CSF 432 Introduction to Network and System Security

This course provides an overview of network and systems security. It provides the underlying theory of computer security. It further introduces hands-on skills and techniques that are essential to effectively secure the networks and systems of large and small organizations. 4 credits

Changing prerequisite.

COLLEGE OF BUSINESS**BUS 462 Supply Chain Network Modeling and Optimization**

Strategic and change management practices necessary for planning/modeling/designing demand-driven value networks through the use of contemporary technologies. 3 credits

Allowing graduate credit.

BUS 464 Supplier Relationship Management

Examines the management and technological practices a firm deploys to develop supplier relationships including: plan, source, make, and deliver. 3 credits

Allowing graduate credit.

COLLEGE OF EDUCATION AND PROFESSIONALS STUDIES**EDC 461 Assessment in Early Childhood Education**

An overview of cognitive, affective, and psychomotor assessments used by early childhood development and education specialists, and examination of the assessment techniques and current trends and practices. 3 credits

Changing course code (HDF to EDC), course title, and prerequisites.

COLLEGE OF ENGINEERING**ELE 401 Lasers, Optical Fibers, and Communication Systems**

Introduction to lasers, LEDs optical fibers and detectors. Properties of Gaussian beams, optical resonators, and diffraction of Gaussian beams. Properties of Fabry-Perot cavities. Introduction to fiber optical communications systems. 3 credits

Course deletion.

ELE 402 Lasers, Optical Fibers, and Communication Systems Laboratory

Laboratory exercises related to topics in ELE 401. 1 credit

Course deletion.

ELE 432 Electrical Engineering Materials

Continuation of 331. Electronic and optical properties of materials, mainly semiconductors, applied to the performance and design of electronic devices. Measurements and analysis of these properties will be performed in the laboratory. 4 credits

Course deletion.

ELE 444 Advanced Electronic Design

Review of number systems, combinational and sequential logic, state machine. Design capture tools, hardware/software design, system implementation using PC's, MSI circuits and FPGAs. *3 credits*
Course deletion.

ELE 445 Advanced Electronic Design Laboratory

Laboratory exercises related to topics in ELE 444. *1 credit*
Course deletion.

ELE/MCE/OCE 456 Foundations of Robotics

The course provides the theoretical background to formulate and address problems in robotics. Its objective is to give a basic understanding of robot kinematics, sensing, actuation, localization, control, and planning. *3 credits*
Changing prerequisite.

COLLEGE OF HEALTH**HDF/SOC 431 Families and Aging**

An analysis of families and interpersonal relationships of older adults. With attention to social, psychological, cultural, economic, and political factors. *3 credits*
Cross-listing with Sociology. Changing course title, description, and prerequisites.

HDF 440 Environmental Context of Aging

Study of normal aging related changes as design determinants of the physical environment. Identifies theories and models of person-environment interaction and environment-behavior issues and procedures for post-occupancy evaluation studies. *3 credits*
Changing course title and prerequisites.

500-Level Course Changes**COLLEGE OF ARTS AND SCIENCES****PSC 501 Seminar in Public Administration and Policy**

Overview of the theoretical and historical evolution of public policy and administration; theories and problems of organization and administrative reform; implementation and policy analysis; and theories of bureaucratic control. *3 credits*
Changing course title, description, and prerequisites.

PSC 524 Seminar in Public Policy Problems

An in-depth exploration of the policy process and public policy problems through the different traditions and approaches of public policy analysis. *3 credits*
Changing course description and prerequisites.

COLLEGE OF EDUCATION AND PROFESSIONALS STUDIES**EDC 553 Higher Education Practicum**

Supervised practicum in higher education placements. Emphasis on applied assignments in the initial stages of college student personnel program. *3 credits*
Changing course code (HDF to EDC).

EDC 554 Contemporary College Student I

First course in sequence examining the learning and growth trajectories of students in higher education. Emphasis on typologies and psychosocial identities in a sociohistorical context. *3 credits*
Changing course code (HDF to EDC), title, description and prerequisites.

EDC 556 Contemporary College Student II

Second course in sequence examining the learning and growth trajectories of students in higher education. Emphasis on cognitive-structural and integrative dimensions in a sociohistorical context. *3 credits*
Changing course code (HDF to EDC), title, description and prerequisites.

EDC 560 Group Procedures and Leadership

Second course in sequence examining the learning and growth trajectories of students in higher education. Emphasis on cognitive-structural and integrative dimensions in a sociohistorical context. *3 credits*
Changing course code (HDF to EDC).

EDC 561 Principles and Practices of College Student Personnel

Survey of the historical, philosophical, sociological, and cultural influences on college student personnel work as a profession and exploration of selected functional areas within student affairs. *3 credits*
Changing course code (HDF to EDC).

EDC 571 Administrative Issues in Student Affairs

Overview of administrative issues faced by student affairs practitioners including: resource management, supervision, budgeting, technology and legal issues. *3 credits*
Changing course code (HDF to EDC).

EDC 572 Environmental Theory and Assessment in Higher Education

Overview of selected person-environmental interaction theories and assessment frameworks applicable in higher education settings. Emphasis on campus ecology, cultural, perceptual, human aggregate, physical/architectural, and behavior setting approaches. *3 credits*
Changing course code (HDF to EDC).

EDC 576 Diversity and Cultural Competence in Student Affairs

Overview of the development of cultural competencies (awareness, knowledge, skills) needed by student affairs professionals and issues faced by diverse college students. *3 credits*
Changing course code (HDF to EDC).

COLLEGE OF HEALTH**HDF 536 Family Dynamics and Health**

Provides an introduction to the research, theory and application of understanding of the major physical and mental health issues facing modern families. *3 credits*
Changing method of instruction from lecture to online or lecture.

KIN 530 Research Methods and Design in Kinesiology

An introduction to the basic aspects of research, including problem selection, literature review, instrumentation, methodology, and the writing of research reports and articles. *3 credits*
Changing course title.

KIN 592 Internship in Kinesiology

Directed field experience under the supervision of a faculty member and a professional member of the cooperating institution. Application of knowledge, synthesis of practical experiences. Paper required. *3 credits*
Changing course title and prerequisite.

KIN 595 Independent Study

Development of an approved project supervised by a member of the graduate faculty. *1-3 credits*
Changing credits from 3 to 1-3.

PHT 585 Physical Therapy Internship II

Assignment to various clinical settings that provide supervised experiences with practicing physical therapists and support personnel. Specific setting and rotational time schedule are determined by the student, academic clinical coordinator, and clinical site.. *4 credits*
Changing prerequisites.

PHT 595 Physical Therapy Internship III

Assignment to various clinical settings that provide supervised experiences with practicing physical therapists and support personnel. Selection of clinical specialty area of student's interest is considered in determination of the setting. *4 credits*
Changing prerequisites.

CHE/BPS 553 Bionanotechnology

Principles and applications of bionanotechnology. Intermolecular forces, self-assembly, biomolecular structure, biological processes, molecular manufacturing, and surface functionalization for designing biodevices and nanomaterials. Overview of current and emerging technologies, safety and ethics.
Cross-listing with BPS. Changing prerequisites and course number to utilize same course code in both colleges.

COLLEGE OF NURSING**NUR 507 Theoretical Basis of Advanced Nursing Practice**

Theories relevant to nursing practice and theories related to decision making, action, knowledge utilization, and influence are examined in relation to their applicability to advanced clinical nursing practice. *3 credits*
Changing course title and description.

COLLEGE OF PHARMACY**BPS/CHE 540 Advanced Drug Delivery Systems**

The course will present the design and principles of advanced drug delivery systems, which have specified drug delivery profiles and significant advantages in therapeutics over conventional dosage forms. *3 credits*
Cross-listing with CHE. Changing prerequisites.

Notice of Change

Pharmaceutical Sciences – Creation of an Accelerated Bachelors/Masters (non-thesis) program in Pharmaceutical Sciences.

Kinesiology – Creation of an Accelerated Bachelors/Masters (thesis or non-thesis) program in Kinesiology.

Political Science – Creation of an Accelerated Bachelors/Masters from the International Studies BA, and the Political Science BA programs to the Master's in International Relations or Political Science. Additional change of core course and elective requirements.

Environmental and Natural Resource Economics – Creation of an Accelerated Bachelors/Masters (non-thesis) program in Environmental and Natural Resource Economics.

College Student Personnel – Moving the CSP program from the Department of Human Development and Family Studies in the College of Health to the School of Education in the College of Education and Professional Studies.

Speech-Language Pathology – Changing admission requirements for ABM program by removing the requirement for the GRE or MAT for URI undergraduates who are applying to the ABM, but only if they have a GPA in the CMD major of 3.5 or higher.

Nursing MS and DNP Programs – 1) Suspension of the Nursing Education and Adult Gerontology specializations in the Nursing MS and DNP programs. 2) Minor changes in the core curriculum in response to American Association of Critical-Care Nurses recommendations for less focus on the philosophy of science and research and enhanced focus on the application of modern nursing research in clinical settings.

Nursing PhD Program – Changes to the course requirements that will significantly enhance the theoretical and research content of the curriculum.

500& 600-Level New Course Proposals

COLLEGE OF ARTS & SCIENCES

AMS 528 Mathematical and Computational Analysis of Data

Mathematical analysis of important techniques used to work with "large" data sets. There will be a special emphasis in Classification, Resampling, Generalized Additive Models and their implementation in R. *4 credits (3 lecture, 1 project). Prerequisites: MTH 215 and MTH 451 or Permission from the instructor.*

AMS 590 Advanced Topics in Applied Mathematics

Advanced topics of current interest in applied and computational mathematics. Applications from engineering, biology, finance, data and network science, along with relevant numerical algorithms, will be considered. *1-4 credits (lecture). Prerequisite: Permission of instructor.*

MTH 590 Advanced Topics in Mathematics

Topics in advanced mathematics to introduce the student to concepts beyond the standard curriculum. *1-4 credits (lecture). Prerequisite: Permission of chairperson.*

MUS 547 Literature Review in Music

Knowledge of purpose, strategies, tools and techniques for reviewing literature in music. Results in a complex literature review for publication or for arguing and defining a music problem requiring further original research. *2 credits (lecture). Prerequisites: Graduate standing or permission of instructor.*

PHY 575 Introduction to Quantum Computing

Qubits and their physical realization. Entanglement and Bell states. Quantum gates and circuits. Quantum algorithms: searches, factoring, Fourier transforms. Quantum information theory with applications to teleportation and cryptography. Physical applications. *3 credits (lecture). Prerequisites: PHY 451 or graduate standing in Physics.*

PHY 576 Advanced Quantum Computing

Advanced quantum circuit theory. Decoherence and density matrices. Error correction. Dense and superdense coding. Quantum tomography. Hardware. *3 credits (lecture). Prerequisites: PHY 575.*

PHY 577 Quantum Computing Internship

Provides students with practical experience in Quantum Computing while working on an internship.
4 credits (practicum). Prerequisites: PHY 575. S/U grading.

COLLEGE OF EDUCATION AND PROFESSIONALS STUDIES

EDC 577 Master's Internship in Student Affairs

Supervised internship in higher education placements. Emphasis on applied student affairs learning in advanced stages of college student personnel program. *3 credits (lecture). Prerequisites: EDC 561 and permission of instructor.*

EDC 578 Master's Internship in Student Affairs

Supervised internship in higher education placements. Emphasis on applied student affairs learning in advanced stages of college student personnel program. *3 credits (lecture). Prerequisites: EDC 577 and permission of instructor.*

EDC 580 Seminar in Student Affairs in Higher Education I

Integrative seminar applying student affairs theory and research to contemporary higher education issues faced by professionals in the field. *3 credits (seminar). Prerequisite: Permission of instructor.*

EDC 585 Seminar in Student Affairs in Higher Education II

Integrative seminar applying student affairs theory and research to contemporary higher education issues faced by professionals in the field. *3 credits (seminar). Prerequisite: Permission of instructor.*

COLLEGE OF THE ENVIRONMENT AND LIFE SCIENCES

NRS 528 Geographical information Systems in Python

Using the Python programming language to undertake and automate GIS processing tasks. *3 credits (1 lecture, 2 laboratory). Prerequisites: NRS 410 or permission from instructor.*

NRS 528X Geographical information Systems in Python

Using the Python programming language to undertake and automate GIS processing tasks. *3 credits (1 lecture, 2 laboratory). Prerequisites: NRS 410 or permission from instructor.*

COLLEGE OF NURSING

NUR 505 Translating Research Evidence into Practice

This course provides an overview of qualitative and quantitative methods and addresses how advanced practice nurses can evaluate, translate and apply research evidence to improve clinical practice and healthcare outcomes. *3 credits (lecture). Prerequisites: Admission to the College of Nursing MS program or by permission of instructor.*

NUR 521 Evidence-Based Strategies to Improve Health

This course examines individual health and health behavior within the larger socio-ecological context, identifies multi-level influences of health across family-, community- and macro-systems, and explores historical and geographic variations. *3 credits (seminar). Prerequisites: Admission to the College of Nursing MS program or by permission of instructor.*

NUR 600 Philosophical Foundations of Healthcare Research

Study of ontological and epistemological foundations of healthcare science and analysis of nursing knowledge. A variety of philosophical positions, along with implications for theory, research and practice will be considered. 3 credits (lecture). *Prerequisites: Admission to the PhD program in Nursing or permission of instructor.*

NUR 649 Responsible Conduct of Nursing & Health Research

This course examines issues related to the responsible conduct and dissemination of research and meets the federal guidelines for graduate training in the responsible conduct of research outlined in the NIH's requirement for Responsible Conduct of Research (NOT-OD-10-019). 1 credit (seminar). *Prerequisites: Admission to the PhD program in Nursing or by permission of instructor.*

NUR 650 Research Roles & Methods in Nursing

This course provides an overview of research roles, trajectories and classic and emerging methodologies for answering research questions relevant to nursing. The strengths and limitations of various approaches are compared. 3 credit (seminar). *Prerequisites: Admission to the PhD program in Nursing or by permission of instructor.*

COLLEGE OF PHARMACY

BPS 537 Biomedical & Pharmaceutical Sciences V

A clear understanding of the physiology, pathophysiology, pharmacology, toxicology, medicinal chemistry, pharmaceuticals, and pharmacokinetics of medications used to treat the disease indications covered in the CTS I-VI sequence. 3 credits (lecture). *Prerequisites: Doctor of Pharmacy professional student. P3 standing.*

BPS 538 Biomedical & Pharmaceutical Sciences VI

A clear understanding of the physiology, pathophysiology, pharmacology, toxicology, medicinal chemistry, pharmaceuticals, and pharmacokinetics of medications used to treat the disease indications covered in the CTS I-VI sequence. 2 credits (lecture). *Prerequisites: Doctor of Pharmacy professional student. P3 standing.*

PHP 527 Clinical & Therapeutic Sciences V

Inpatient management of medically complex patients, including those requiring critical care. Focuses on severe or decompensated conditions - renal, cardiac, cerebrovascular, endocrine, hepatic, and infectious diseases. 4 credits (3 lecture, 1 recitation). *Prerequisites: Third professional year Doctor of Pharmacy student.*

PHP 528 Clinical & Therapeutic Sciences VI

Topics in hematology, oncology, dermatology, and ophthalmology are covered in the final course of the Clinical & Therapeutic Sciences (CTS) sequence. 4 credits (3 lecture, 1 recitation). *Prerequisites: Third professional year Doctor of Pharmacy student.*

PHP 548 Comprehensive Pharmacy Practice and Patient Care

This comprehensive capstone course will focus on integration and application of knowledge already gained throughout the didactic curriculum, providing students an opportunity to apply their clinical and practice skills before embarking on advanced pharmacy practice experiences (APPEs). 4 credits (practicum). *Prerequisites: Third professional year Doctor of Pharmacy student. S/U grading.*

VI. Adjournment