

To: Members of the 2021-2022 Graduate Council

From: Fred Vetter, Chair
Brenton Deboef, Dean

Date: November 29, 2021

RE: Agenda for Meeting Number 544 of the Graduate Council to be held on Monday, November 29, 2021 at 2:00 p.m. via Zoom.

I. Call to order

II. Approval of Minutes of Meeting Number 543, November 8, 2021

III. Conferral of December Degree (*DeBoef*)

IV. Announcements

- A. Professional Development & GWC Update (*Mitnick*)
- B. EGRA Update (*DeBoef*)
- C. Quali Curriculum Management System (*DeBoef*)
- D. International Applicant Language Requirements (*Kulesh & DeBoef*)
- E. New Fellowships for Ph.D. Applicants (*DeBoef*)
- F. Recent appointments to the Graduate Faculty since those listed on November 8, 2021 meeting agenda (*DeBoef*)

John DiCecco, Adjunct Professor, Electrical, Computer and Biomedical Engineering

V. New Business

- A. Results of Program Directors Survey Results (*DeBoef*)

VI. Old Business

- A. Comprehensive Exam Discussion (*DeBoef*)

VII. New Graduate Programs & Notice of Change (See Google Drive for New Program Proposals) (*DeBoef*)

Notice of Change

Master of Music, Music Performance Option - updating curriculum and requiring 500 level courses to fulfill the required 9 credits in Music History and Music Theory

New Program Proposal

(Tabled) Accelerated Online Graduate Certificate Program in Quantum Computing

VIII. Graduate Curriculum (See Google Drive for Curriculum Proposals) (DeBoef)

500-Level Course Changes

COLLEGE OF BUSINESS

MBA 500 Statistical Methods for Management

Introductory statistical methods applied to business problems. Topics include descriptive statistics, probability, distributions, inference, regression analysis, chi-square analysis, and introduction to time series.

Create online version of existing course

MBA 504 Financial Management

Functions and responsibilities of financial managers. Examination of: financial statement analysis, cost of capital, capital structure, valuation, markets, capital budgeting, working capital, mergers, bankruptcy, multinational finance.

PRE: MBA 500, 503 or 533, and ECN 590.

Create online version of existing course

MBA 555 Managerial Economics

Microeconomic theories of demand, pricing, production, and cost management applied to the risk-management process of the firm. Extensive empirical model building and business analytics PRE: MBA 504 or 534

Create online version of existing course

COLLEGE OF EDUCATION AND PROFESSIONAL STUDIES

EDC 571 Administrative Issues in Student Affairs

Overview of higher education organizational and administrative issues faced by student affairs professionals.

Course description change

COLLEGE OF ENVIRONMENTAL AND LIFE SCIENCES

CMB 599 Research Grant Management

Course deletion

MAF 589 Master's Project Research

IND: (3 crs.) Preparation and oral presentation of a major research paper project for M.M.A. students under the guidance of a graduate faculty member. (Independent Study) Pre: graduate standing in the M.M.A. program. S/U credit.

Course description change

COLLEGE OF HEALTH SCIENCES

CMD 561 Speech Sound Disorders

LEC: (3 crs.) Assessment, design, and implementation of therapeutic management programs for various speech sound disorders at the articulatory and phonological levels. (Lec. 3) Pre: CMD 372, 373, 374, 375, or equivalent, or permission of instructor.

Course title change

COLLEGE OF PHARMACY

600-Level Course Changes

COLLEGE OF ENVIRONMENTAL AND LIFE SCIENCES

CMB 699 Doctoral Dissertation Research

Course deletion

500-Level New Course Proposals

COLLEGE OF EDUCATION AND PROFESSIONAL STUDIES

EDC 573 Higher Education Law & Policy

IND: (3 crs.) Preparation and oral presentation of a major research paper project for M.M.A. students under the guidance of a graduate faculty member. (Independent Study) Pre: graduate standing in the M.M.A. program. S/U credit.

COLLEGE OF ARTS & SCIENCES

(Tabled) PHY/AMS 571 Mathematical Methods for Quantum Computing

Math methods needed for quantum computing including linear vector spaces, linear operators, Hermitian and unitary operators, eigenvectors and eigenvalues, with an introduction to coding in Python. PRE: Permission of Instructor

(Tabled) PHY 572 Foundations of Quantum Mechanics

introduction to the foundations of quantum mechanics, including distinctions between quantum and classical mechanics, axioms of quantum mechanics, spin 1/2 systems, operators, time evolution, measurement, qubits, entanglement and superposition. PRE: PHY571, Permission of Instructor

(Tabled) PHY 573 Introduction to Quantum Computing

Algorithms: searches, factoring, Fourier transforms. Applications to teleportation and cryptography. Physical applications. PRE: PHY 572, Permission of Instructor

(Tabled) PHY 574 Quantum Technology

EC: (3 credits) Advanced quantum circuit theory. Decoherence and density matrices. Error correction. Dense and superdense coding. Quantum tomography. Hardware. PRE: PHY 573, Permission of Instructor

IX. Adjournment 3:51 pm