UCF Graduate Council	
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Vinutes of Octobe	r 29, 2008 meeting
Members Present	Patricia Bishop, Deborah Breiter, Ram Mohapatra, Max Poole, Tison Pugh, James Turkson, Art Weeks
Members Present Recorder Guests Present	James Turkson, Art Weeks

Welcome and call to order. The meeting was called to order at 11:30 by Ram Mohapatra, chair. A quorum was established.

Minutes. The minutes of the October 15 meeting were approved.

**Common curricular terms.** Feedback was solicited by the committee on common curricular elements, a handout prepared by using curricular submissions last year to the graduate catalog. All thought that most of these terms fit into their college's programs. There was a question on whether core or comprehensive exams should be added to this list. The committee was asked to give more thought to this and to provide any additional feedback.

Revisions to the MFA in Film and Digital Media, Visual Language and Interactive Media track, CAH. This was tabled last meeting as there was some confusion regarding the two versions of copy. Dr. Maunez-Cuadra presented a summary of the changes. The department requested to increase the number of required hours (21 to 32) and decreasing the number of electives (21 to 18) and a decreased number of thesis hours (18 to 10). They will still require the GRE in both MA and MFA. This proposal received unanimous approval.

**Courses and special topics.** Please refer to the attachment at the top of this page for a complete list of the minutes for the courses and special topics.

Announcements and adjournment. The meeting was adjourned at 1:05 p.m. The next meeting will be November 12, 2008, 11:30, MH 243.

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## Graduate Curriculum Committee Course Minutes 10-29-08

All courses were approved unless otherwise noted. Any notation refers to the course directly below the notation.

### **College of Medicine Special Topics**

Tabled – requested clarification on description.

MCB 5937 Sect 01 COM-Molecular & Microbiology 1(1,0)

**ST: Industrial Perspectives Seminar:** PR: Biotechnology M.S. students. Learning concepts of basic research and drug development in the pharmaceutical industry and a technical presentation.

30 character abbreviation: **<u>ST: Industrial Persp Seminar</u>** AGENDA NOTES: Course Addition also being proposed.

### **College of Sciences Special Topics**

Tabled – requested clarification on description.

MAP 6938 Sect 01 COS-Mathematics 3(3,0)

**ST: Sparse Representations:** PR: MAA 5210 and MAS 5145, or, STA 6326 and STA 6329, or CI. Approximation theory, nonparametric regression, classification and learning theory.

30 character abbreviation: ST: Sparse Representations

### Engineering & Computer Science Special Topics

CAP 6938 Sect 01 ECS-Computer Science 3(3,0)

**ST: Computational Approaches in Comparative Genomics:** PR: CAP 5510 or COT 5405 or C.I. Computational techniques for comparing genomes on the DNA and protein sequence levels. Topics include state of the art computational techniques and their applications: understanding of hereditary diseases and cancer, genetic mobile elements, genome rearrangements, genome evolution, and the identification of potential drug targets in microbial genomes.

30 character abbreviation: **ST: Comp Approach Comp Genomic** 

### EEL 5937 Sect 01 ECS-Electrical & Computer Eng 3(3,0)

**St: Biomedical Effects and Applications of Electromagnetic Energy:** PR: EEL 3470 or C.I. This course covers RF and microwave energy and their interaction with biological materials. Specific biomedical effects such as absorption, thermal therapy, hyperthermia etc will be discussed.

30 character abbreviation: St: Biomedical Effects of EM\_\_\_\_

### **College of Optics & Photonics Special Topics**

OSE 6938 Sect 01 OPT-Optics 3(3,0)

**ST: Integrated Photonic Devices:** PR: Graduate Standing and OSE 5414 or C.I. The course reviews working principle, system functionality and design and fabrication issues of semiconductor integrated photonic devices and circuits for optical telecommunication and interconnect applications.

30 character abbreviation: ST: Intergr Photonic Devices

### Rosen College of Hospitality Management Special Topics

HFT 6938 RCHM-Tourism, Events, & Attractions 3(3,0)

**ST: Principles of Destination Marketing and Management**: PR: HFT 6596 Hospitality Marketing. Examines strategies for creating integrated destination marketing and management systems; concepts and strategies for destination competitiveness and sustainability; trends/challenges influencing destination marketing and management.

30 character abbreviation: **Princ of Dest Market & Mgmt** *AGENDA NOTES: Course Addition also being proposed.* 

### College of Arts & Humanities Course Action Additions

LIT 6XXX CAH-English 3(3,0)

**Studies in Contemporary Nonfiction:** PR: Admission to the Creative Writing MFA Program or C.I. based on submission of manuscript. Comprehensive study of nonfiction, including memoir, personal essay, literary journalism, and/or nature writing, with special emphasis on craft.

30 character abbreviation: Studies in Cont Nonfiction

### MUE 6XXX CAH-Music 3(3,0)

Introduction to Research in Music Education: PR: Graduate Standing or C.I. Basic concepts of research in Music Education. Students will read, analyze, and discuss current research literature, and write research reports.

30 character abbreviation: Intro to Res in Music Educ

### College of Medicine Course Action Additions

Tabled – requested clarification on description.

MCB 5XXX COM-Molecular & Microbiology 1(1,0)

**Industrial Perspectives Seminar:** PR: Biotechnology MS Students. Learning concepts of basic research and drug development in the pharmaceutical industry and technical presentation.

30 character abbreviation: Industrial Persp Seminar AGENDA NOTES: Special Topic also being proposed.

### College of Sciences Course Action Additions

Tabled – requested additional clarification between 4000 and 5000 level split classes to show differences in grading and more rigor in assignments.

#### COS-Physics 3(3,0) AST 5XXX

Advanced Observational Astronomy: PR: Graduate standing in the Physics department or in another department with CI. Experimental design and experimental techniques in astrophysics; spherical astronomy; physics of telescopes and of common astronomical detectors; error analysis.

30 character abbreviation: Adv Observational Astronomy

#### PHY 6XXXC COS-Physics 3(2,2)

#### Tabled – faculty wants to revise to 5000 level course.

Theory and Computations of Molecular Wavefunctions: PR: Undergraduate Quantum Mechanics or Physical Chemistry or C.I. Approximate method of solving electronic Schrodinger equation for molecular systems: Hartree-Fock and semiempirical methods, basis sets, multireference wavefunction theory methods, potential surfaces, electronic transitions.

30 character abbreviation: Molecular Wavefunction Theory\_

AGENDA NOTES: Special Topic also being proposed.

## **Engineering & Computer Science Course Action Additions**

Tabled

#### COP 6XXX **ECS-Computer Science** 3(3,0)

Network Optimization: PR: Graduate standing. Recent advances in theory and computational techniques for optimal design and analysis of large networks for computers communications, and transportation including Internet and WWW complex networks

30 character abbreviation: Network Optimization

#### Rosen College of Hospitality Management Course Action Additions HFT 6XXX RCHM-Tourism, Events, & Attractions 3(3,0) **Principles of Destination Marketing and Management**

PR: HFT 6596 Hospitality Marketing.

Examines strategies for creating integrated destination marketing and management systems; concepts and strategies for destination competitiveness and sustainability; trends/challenges influencing destination marketing and management.

30 character abbreviation: Princ of Dest Market & Mgmt

### **College of Graduate Studies Course Action Additions**

Tabled - requested clarification on difference of this course to IDS 6669 and requested to see course in the context of the program's course requirements. IDS 6XXX CGS-Interdisciplinarity 3(3,0)

### Interdisciplinarity

This course examines the history and challenges of interdisciplinary teaching and scholarship. We start by posing the question, "What is a discipline?" Then we will explore various interdisciplinary approaches and scholarship. Our final goal is for each student to present an interdisciplinary research proposal that will guide their work on their Interdisciplinary Studies MA or MS thesis.

30 character abbreviation: Interdisciplinarity

### College of Sciences Course Action Revisions

Tabled-requested clarification on what the lab work consisted of.

PCB 7049C Conservation Biology Practice 4(2,6) 4(2,4)

PR: Acceptance into the Conservation Biology Ph.D. program. Case studies and evaluation of local and regional conservation issues from a biological perspective.

#### ZOO 5463C Herpetology

4<del>(2,6)</del> 4(2,4)

PR: 6 hours of zoology, and graduate status or senior standing, or C.I. PR: PCB 3044 or PCB 4683 or equivalent.

Introduction to the biology of the amphibians and reptiles, their classification, evolution, and life histories.

Materials & Supply Fee: \$15.00

## Engineering & Computer Science Course Action Revisions

COP 5537 Network Optimization

3(3,0)

PR: Graduate Standing or C.I.

Recent advances in the theory and computational techniques for optimal design and analysis of large networks for computers, communications, transportation, web and other applications.

Techniques for modeling complex, interconnected systems as networks; optimization with graph theory; algorithms, data structures, and computational complexity; statistical methods for studying large, evolving networks.

## Health & Public Affairs Course Action Revisions

PHT 6070C Radiology/Imaging for Physical Therapy 4(3,1)

<u>3(3,1)</u>

PR: Admission to DPT program.

A diagnostic imaging course focusing on clinical implications in rehabilitation. The focus will be on patients with neurological and orthopedic disorders.

### College of Optics & Photonics Course Action Revisions

Tabled-requested clarification on the prereq. Have received updated information on all Optics courses.

#### Interference and Diffraction OSE 5115 OSE 6115

PR: Graduate status or senior standing, or C.I. C.I.

Interference of light, optical interferometry, Fraunhofer and Fresnel scalar diffraction, diffraction gratings, temporal coherence, spatial coherence, and partial coherence.

#### Tabled-requested clarification on the prereq.

OSE 6211 **Fourier Optics** 

PR: Graduate Standing or C.I.

Application of Fourier transform theory to optical systems design. Development of optical correlation techniques. Holographic techniques and applications

#### Tabled-requested clarification on the prereq.

#### OSE 6225 Radiation and Detection Radiometry and Detection

3(3,0)

3(3,0)

PR: C.I. PR: Graduate Standing or C.I.

Radiometry, Planck radiators, spectrometers, photon-counting statistics, detector noise analysis, detector mechanisms.

30 character abbreviation: Radiometry and Detection

#### Tabled-requested clarification on the prereq.

#### OSE 5234 Applied Optics Laboratory **OSE 6234C**

PR: Graduate Standing or C.I.

Laboratory Techniques for observing optical phenomena and quantitative experimental study of geometrical optics, optical interferometry, diffraction, and image processing.

#### **OSE 6265 Optical Systems Design**

PR: PR: Graduate Standing and OSE 5203 or C.I.

Design principles of lens and mirror optical systems; evaluation of designs using computer techniques.

#### OSE 6314 Optics of Low Dimensional Semiconductors 3(3,0)

PR: P.R. PR: Graduate Standing and OSE 5312 or C.I.

Optical properties and semiconductor physics of low-dimensional systems (quantum wells, wires, and dots), nano-photonic devices, and future nano-optical concepts.

#### OSE 6334 **Nonlinear Optics**

**OSE 6334C** 

PR: PHY 5346. PR: Graduate Standing and OSE 6111 or C.I.

Maxwell's equations in nonlinear media, frequency conversion techniques (SHG, SFG, OPO), stimulated scattering, phase conjugation, wave-guided optics, nonlinear crystals.

#### **OSE 6335** Nonlinear Guided Wave Optics

PR: PHY 5346, PHY 6347, PR: Graduate Standing and OSE 6334. 6334 or C.I.

### 3(3,0)

3(2.5,0.5)

3(3.0)

3(1,3)

3(3,0)

The physics and applications of nonlinear optical interactions in fibers and planar waveguides is discussed, including parametric processes, all-optical effects and solitons.

#### Tabled-requested clarification on the prereq.

#### **OSE 6347 Quantum Optics**

3(3.0) PR: PHY 5606, PHY 5346, OSE 5511. PR: Graduate Standing or C.I.

Semiclassical treatment of light/matter interactions (quantized atomic states plus Maxwell's equations). Density matrix theory, coherent optical transients, pulse propagation.

#### OSE 6432 **Fundamentals of Photonics**

PR: PR: Graduate Standing and OSE 6111 and graduate standing or C.I. or OSE 5041 or C.I.

Principles of guided wave optics, electro-optics, acousto-optics and optoelectronics.

#### OSE 6455L Photonics Laboratory **OSE 6455C**

PR: Graduate standing and OSE 6432 or C.I.

experimental study of photonic devices and systems including liquid crystal displays, fiber-optic sensors, laser diodes, electro optic modulation, acousto-optic modulation. lightwave detection, optical communications, and photonic signal processing.

#### Tabled-requested clarification on the prereq.

#### Photonic Signal Processing OSE 6457

PR: Graduate Standing or C.I.

Design, building and testing of photonic information processing systems using fiberoptics bulk polarization optics, acousto-optics, liquid crystals, micromirrors, and integrated optics.

#### OSE 6525 Laser Engineering

PR: PR: Graduate Standing and OSE 5041 or C.I.

Principles of laser amplification and oscillations; design of lasers; general characteristics of excitation systems.

#### OSE 6526L Laser Engineering Laboratory 3(1,3) **OSE 6526C**

PR: OSE 6525, OSE 5511, PR: Graduate Standing and OSE 6525 or C.I.

Designing and device implementation of diode pumped solid-state lasers, nonlinear frequency conversion, Q-switching, mode locking, and pulse second harmonic generation.

Tabled-requested clarification on the prereq. **OSE 6536** Semiconductor Lasers 3(3,0) PR: Optics Majors PR: Graduate Standing or C.I.

3(3,0)

# 3(1,3)

3(3,0)

3(3,0)

Light-matter interaction, thermal physics and solid state physics to understand, analyze, and engineer semiconductor lasers with different active region dimensionalities.

### OSE 6650 Optical Properties of Nanostructured Materials 3(3,0)

PR: PR: Graduate Standing OSE 6111, OSE 5312, C.I. or C.I.

Theory and application of nanostructured optical materials: Effective medium theory, nanostructured surfaces, plasmon waveguides, nanophotonic circuits, metallic near-field lenses, collective modes in nanoparticle arrays, metamaterials.

### College of Nursing Course Action Revisions

NGR 6723 Nursing Leadership and Management 3(3,0)

PR: Admission to MSN program, NGR 5720, CR: NGR 6723L. MSN, DNP or PhD program, or C.I. Co:requisite: For MSN students completing Core Requirements for Nursing Leadership and Management: NGR 6723 and NGR 6723L: Role Specialization in Nursing Leadership and Management must be taken concurrently.

In depth analysis of human resources management, regulatory compliance and systems leadership in nursing.

Analysis, synthesis and application of health care leadership principles including health and patient care, delivery systems, personnel management and finance, ethical, legal and regulatory requirements.

# NGR 6723LNursing Leadership Management Practicum 3(0,9)Nursing Leadership Role Specialization Practicum3(0,3)

PR: Admit to MSN program, NGR 5720. CR: leadership and management track. Corequisites: Concurrent enrollment in NGR 6723.

Preceptor experience with a nurse leader in area of role specialization. Experience will focus on the Preceptor supervised experience focused on analysis, synthesis and application of principles related to <u>nursing</u> health care leadership including health care delivery systems across the continuum, patient care delivery models, staffing, personnel management and legal and regulatory requirements. Graded S/U. leadership.

Will no longer be graded S/U.

30 character abbreviation: Nursing Leader Spec Practicum