



# The Graduate School

## UNIVERSITY OF SOUTH CAROLINA

### GRADUATE COUNCIL AGENDA December 5, 2011

### AGENDA

**To:** Graduate Council

Dr. Cheryl Addy, Chair; Drs., Deborah Brosdahl, Subra Bulusu, Wayne Carver, David Damofal, Edward Gatzke, John Grego, Michael Hodgson, Rhonda Jeffries, J. Daniel Jenkins, Ann Johnson, Xinfeng Liu, Kartik Kalaighnam, Michelle Maher, Srihari Nelakuditi, Joe Quattro, Paul Solomon, and Ercan Turk; Robynn Mackechnie, GSA Representative

**CC:** President Harris Pastides, Provost Michael Amiridis, Dr. Kristia Finnigan, Deans, Department Chairs, Graduate Directors, and graduate program administrators

**From:** Dr. Lacy Ford, Vice Provost and Dean of Graduate Studies

**RE:** Graduate Council Meeting Agenda for December 5, 2011

The Graduate Council will not meet on Monday, December 5, 2011 at 2:00 PM in Room 311 Byrnes but will rather vote on proposals electronically. The following items will be on the agenda:

1. **Call to Order and Approval of Agenda** (Cheryl Addy)
2. **Approval of minutes slated for January 16, 2011** ([Minutes of the November 28, 2011 meeting](#)) Approval actions by Graduate Council become effective 30 days after posting but due the holiday schedule 15 additional days have been allotted.[Copy on file at The Graduate School; also posted on The Graduate School website at <http://gradschool.sc.edu/gradcouncil/minutes/> ] as per policy.
3. **Report of the Chair** (Cheryl Addy)
4. **Report of the Dean of Graduate Studies** (Lacy Ford)
5. **Report of the Secretary of the Graduate Council / Associate Dean** (Nancy Zimmerman)

6. **Report of the Graduate Student Association Representative** (Robynn Mackechnie)
7. **Report of the Academic Policy and Practices Committee** (Joseph Quattro)
8. **Report of the 500/600 Level Courses Committee** (Nancy Zimmerman)
9. **500-600 Level course approvals)**
10. **Fellowships and Scholarships Committee** (Wayne Carver)
11. **Report of Science, Math, and Related Professional Programs Committee** (John Grego)

## **COLLEGE OF ENGINEERING AND COMPUTING**

### ***Mechanical Engineering***

New Course Proposal/Distance Education Delivery Proposal:

[EMCH 774 Radiation Damage \(3\)](#)

Structural materials for nuclear application; Radiation interaction with matter; Microstructure evolution under irradiation; Material properties degradation under irradiation.

Prerequisite: EMCH 573 or Instructor's Pre-approval

[Effective: Spring 2012]

Academic Program Action Proposal/Bulletin Change:

[Aerospace Engineering](#)

The proposed Masters Degree Program in Aerospace Engineering will be in demand from engineers interested in pursuing a career in the expanding aerospace industry in South Carolina. The aerospace masters degree will attract both new engineering graduates as well as engineers already in the workforce. The degree will be available to both on-campus and off-campus students. The off-campus students will be instructed via the existing USC distance learning program, APOGEE. All courses offered on-campus will be video streamed for off-campus students.

The pool of off-campus students will primarily be SC residents working full-time in SC industries, but may also include students located nationally and internationally, as well as US citizens on overseas deployment. This masters program will also be desirable to current undergraduate mechanical, electrical, and chemical engineering students who are interested in acquiring skills needed for employment in the aerospace industry. USC already has an Accelerated Masters Degree program,

where students with a GPA of 3.5/4.0 and above may take up to three graduate courses while pursuing their undergraduate degrees. This allows students to get the MS/ME degree within a year of their baccalaureate degree. Engineers having a masters degree should be better prepared for the challenging and higher paying jobs in the aerospace industry, plus more attractive to the aerospace companies.

Once fully developed, an annual program student enrollment of about 15-20 for in-class instruction and about 30-35 through distance education is anticipated. Based on the data reported by American Society for Engineering Education, Table 1 lists the 2010 enrollments at the US institutions offering Aerospace Engineering Programs. As previously noted, the data shows that no institution in South Carolina offers an Aerospace Engineering Degree program. The neighboring states of North Carolina and Georgia each have one institution with an Aerospace Degree Program.

[Effective: Fall 2012]

New Course Proposal/Distance Education Delivery Proposal:

[EMCH 721 Aeroelasticity \(3\)](#)

Study the principles and applications of aircraft aeroelasticity with emphasis on aircraft structural dynamics, vibrations, unsteady aerodynamics, and interaction thereof.

Course Prerequisite: Instructor permission

[Effective: Fall 2012]

New Course Proposal/Distance Education Delivery Proposal:

[EMCH 743 Aircraft and Rocket Propulsion \(3\)](#)

Introduction to aircraft and rocket engines with emphasis on the performance and characteristics of various types of propulsion systems, including turbojet, turbofan, turboprop, ramjet, scramjet, and liquid and solid propellant rockets.

Course Prerequisites/Corequisite: EMCH 544 Compressible Flows

[Effective: Spring 2012]

New Course Proposal/Distance Education Delivery Proposal:

[EMCH 744 Aerodynamics & Flight Mechanics \(3\)](#)

Aerodynamics of wings and bodies in aircraft and the static and dynamic analysis of airplane flight mechanics. Topics include fundamentals of potential flows, thin airfoil theory, finite wing theory, laminar and turbulent boundary layers, trajectory analysis, and stability and control of an airplane.

[Effective: Fall 2012]

New Course Proposal/Distance Education Delivery Proposal:

[EMCH 777 Aerospace Structures II \(3\)](#)

Principles and applications of aerospace structures with emphasis on the construction and analysis of thin-wall monocoque and semi-monocoque wings and fuselages

Course Prerequisite/Corequisite: EMCH 577 Aerospace Structures I

[Effective: Spring 2012]

New Course Proposal/Distance Education Delivery Proposal:

[EMCH 785 Design of Composite Materials for Aerospace Structures \(3\)](#)

Property and performance requirements for aerospace structures. Design for stiffness, strength, durability, damage tolerance, and life at the lamina, laminate, and structural level (materials and analysis).

Course Prerequisite: Instructor Approval

[Effective: Spring 2013]

**12. Report of the Humanities, Social Sciences, Education, and Related Professional Programs Committee (Deborah Brosdahl)**

**SCHOOL OF JOURNALISM AND MASS COMMUNICATIONS**

Course Change Proposal:

**From:** [JOUR 810 Independent Research Project \(3\)](#)

Working closely with a faculty member, a student will design, and conduct a research project, with the objective of submitting the final report for publication or for presentation at an academic conference in the discipline.

**To:** JOUR 810 Independent Research Project (3-6) variable  
Working closely with a faculty member, a student will

design, and conduct a research project, with the objective of submitting the final report for publication or for presentation at an academic conference in the discipline.

May be repeated for a maximum of 6 credit hours

[Effective: Spring 2012]

## **SCHOOL OF MUSIC**

Academic Program Action Proposal/Bulletin Change:

[Music PhD 18 credit hours or less](#)

The music education faculty at USC have long desired to increase the number of hours in the Ph.D. in Music Education from 48 to 60 hours so that students could complete a wider variety of music education courses, receive better preparation in research methods, and be encouraged to complete more music courses in their areas of interest. (For instance, a choral conductor pursuing the Ph.D. in music education would have greater opportunities to take conducting and choral literature courses.) A survey of degree information from peer and aspirant peer institutions reveals that most of the institutions require completion of at least 60 hours for their Ph.D. programs in music education.

[Effective: Fall 2012]

Academic Program Action Proposal/Bulletin Change:

[Six Master of Music degrees will be grouped into a single degree](#)

When most of the Master of Music degrees were established at USC decades ago, the National Association of Schools of Music (the accreditation body for college and university schools of music) favored degrees with distinctive titles that described their purpose. As a result, several Master of Music degrees with a variety of degree names were created and approved. The admission requirements and procedures for these degrees are similar, there is some common coursework among them, and the oral comprehensive exam at the end of the degree is common to all.

At the present time, the National Association of Schools of Music allows for "generic" Master of Music degrees comprising a variety of majors or concentrations. We, therefore, propose to gather the following degrees under the umbrella of a single Master of Music degree with a single major in music and a single CIP major code:

Master of Music in Composition  
Master of Music in Conducting

Master of Music in Jazz Studies  
Master of Music in Music History  
Master of Music in Opera Theatre  
Master of Music in Piano Pedagogy

The six current majors will be coded as areas or emphasis or concentrations. The Master of Music in Performance and the Master of Music Education degrees will remain as distinct degrees with distinct CIP codes.

It should be noted that these changes affect only the nomenclature of the degrees. The curricula remain unchanged.

[Effective: Fall 2013]

**13. Report of the Petitions and Appeals Committee (Rhonda Jeffries)**

**14. Other Committee Reports**

**15. Old Business**

**16. New Business**

**17. Good of the Order**

**18. Adjournment**