The Graduate Council met on Monday December 10, 2012 at 2:00 P.M. in room 311 of the Byrnes Building.

**Graduate Council members present:** Dr. Joseph Quattro, Chair; Drs. Subra Bulusu, Wayne Carver, Erik Drasgow, Minuette Floyd, Stacy Fritz, Edward Gatzke, Michael Hodgson, J. Daniel Jenkins, DeAnne Messias, Murray Mitchell, Paul Solomon, Ercan Turk, Lee Walker (for David Darmofal); GSA Representative, John Knox.

**Graduate Council members excused:** Drs. Terrance Weik, Lauren Sklaroff, Tracey Weldon-Stewart

**Graduate Council members absent:** Drs. Kartik Kalaignanam, Adela Vraciu

**Graduate School representatives:** Dr. Jessica Elfenbein, Dale Moore and Valarie Trapp

**Guests:** Drs. C.V. Patel, Mohammad Ali and M. Mahmud Khan

**NOTE:** These minutes will become final on January 18, 2013, if not challenged.

1. **Call to Order and Approval of Agenda** (Joseph Quattro).

   Dr. Quattro called the meeting to order at 2:00 p.m.

2. **Approval of minutes** ([Minutes of the November 26, 2012 meeting](http://app.gradschool.sc.edu/gradcouncil/minutes.asp)). The minutes were reviewed electronically and approved by the Council. The minutes are posted on The Graduate School website at:

   [http://app.gradschool.sc.edu/gradcouncil/minutes.asp](http://app.gradschool.sc.edu/gradcouncil/minutes.asp)

3. **Report of the Chair** (Joseph Quattro)

   No Report

4. **Report of the Dean of The Graduate School** (Lacy Ford is excused)

   Dr. Elfenbein announced that she has recently learned of the Presidential initiative in the form of the Palmetto College with implications for graduate programs. The most pressing initiative launches in the Engineering program on March 18th, 2013—that will be the date that students will begin in the program. Additional programs will be proposed in the coming months. This will be a topic for discussion at our next Graduate Council Meeting.
Dr. Gatzke stated that he is in the College of Engineering and is not aware of any information regarding this initiative.

Dr. Mitchell confirmed that the information shared was everything The Graduate School has learned to date.

5. **Report of the Associate Dean / Secretary of the Graduate Council**  
   (Murray Mitchell)

   Dr. Mitchell asked that the Grad Council members and guests please sign in at this time, and at all future meetings, for record keeping of participation of members and guests.

   Dr. Mitchell asked if the council members would like to continue with the agenda paper copies provided at the monthly meeting. The consensus is that most would like to continue with the current format of printed agendas.

   Dr. Mitchell announced that the dates for Final Defense and Graduation Clearance for upcoming spring and summer semesters will be uploaded onto The Graduate School website as quickly as possible.

   Dr. Mitchell announced that the Doctoral Hooding ceremony will be Monday, December 17th at 1:30pm in the Koger Center. He encouraged everyone to attend the ceremony to take advantage of the opportunity to recognize the quality students in the university’s programs.

6. **Report of the Graduate Student Association Representative** (John Knox)

   No Report


   No Report

8. **Report of the Committee on 500/600 Level Courses, Distance Education and Special Courses** (Murray Mitchell)

   **DED and Special Topics Course Approvals:**

   - **SOWK J 768 I International Social Work and Social Justice Issues** (3)  
     [Effective Term: Spring 2013]

   - **SOWK J 768 C Crisis Intervention** (3)  
     [Effective Term: Spring 2013]

   **DED course approvals:**

   - **ITEC J 747 Management of Health Information Systems** (3)  
     [Effective Term: Spring 2013]

   - **ITEC J 770 Health IT Database Systems** (3)  
     [Effective Term: Spring 2013]

9. **Fellowships and Scholarships Committee** (Wayne Carver)

   Dr. Carver reminded the Council that the first recruitment fellowship deadline is January
25th, 2013; and, the following week, the committee will have a meeting on February 4th in order to expedite the turn-around.

Dr. Elfenbein stated that the language in the qualifications and criteria is updated and "all inclusive".

Dr. Elfenbein advised, for the committee to consider the guidelines that stipulate the AAR students must be admitted to the Graduate School. She stated that if any program is nominating more than one student they must rank the students in order of departmental preference.

(Edward Gatzke)

ARNOLD SCHOOL OF PUBLIC HEALTH
Health Services Policy and Management

Course Change Proposal/Bulletin Change: APPROVED

From: HSPM 708 Cost Benefit Analysis in Health (3)

Economic analysis of health projects. Involves the theory of cost benefit analysis and the application of cost benefit analysis to the health sector.

[Prerequisites: HSPM 712]

To: HSPM 708 Cost Benefit Analysis in Health (3)

Economic evaluation, analysis of cost, effectiveness and benefits of health interventions. Involves conceptual foundations and practical skills needed for conducting economic evaluations in the health sector.

[Prerequisites: None]

[Effective Term: Spring 2013]

SCHOOL OF MEDICINE
Biomedical Sciences

Bulletin Change: APPROVED

From: Biomedical Studies Certificate Program (18)

Overview
This one-year certificate program offers advanced graduate level training in a number of areas of biomedical sciences. It is designed for individuals seeking to enhance further their background in the basic health sciences prior to entry into professional schools including medical, dental, veterinary and osteopathic medicine schools. This program is not intended to provide undergraduate-level training in pre-medical course work needed to get admission into medical or professional schools. Instead, the program is
designed to make post baccalaureate students more competitive for admission through extensive graduate-level course work in the areas of physiology, pharmacology, biochemistry, cell and molecular biology, and neuroscience along with several other elective courses in the biomedical sciences. In addition, students will take courses in the ethics of medical science, MCAT (or similar) preparation and the preparation of a professional school application. Completion of the certificate requires 18 credit hours at the graduate level with required courses and additional electives.

Admission Requirements

Admission requires a baccalaureate degree with training in chemistry (particularly organic chemistry), biology and physics. A GPA of 2.8-3.0 or above and a GRE score of at least 1100 (V+Q), or an MCAT score of 21 or greater are also needed.

Degree Requirements (18 Hours)

Required Courses Include:

- PHPH 701 - Physiology for Health Sciences
- PHPH 705 - Biomedical Pharmacology
- CHEM 751 - Biosynthesis of Macromolecules
- CHEM 753 - Enzymology and Protein Chemistry

Elective Courses Include

One 3 credit course per semester.

- PHPH 750 - Fundamental Neuroscience I
- CHEM 752 - Regulation and Integration of Metabolism
- BMSC 705 - Medical Cell Biology II

To: Biomedical Sciences Certificate Program (18)

Overview

This one-year certificate program offers advanced graduate level training in a number of areas of biomedical sciences. It is designed for individuals seeking to enhance further their background in the basic health sciences prior to entry into professional schools including medical, dental, veterinary and osteopathic medicine schools. This program is not intended to provide undergraduate-level training in pre-medical course work needed to get admission into medical or professional schools. Instead, the program is designed to make post baccalaureate students more competitive for admission through extensive graduate-level course work in the areas of physiology, pharmacology, biochemistry, cell and molecular biology, and neuroscience along with several other elective courses in the biomedical sciences. In addition, students will take courses in the ethics of medical science, MCAT (or similar) preparation and the preparation of a professional school application. Completion of the certificate requires 18 credit hours at the graduate level with required courses and additional electives.
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Degree Requirements (18 Hours)

Required Courses Include:

- BMSC 707 - Biochemistry for Biomedical Sciences
- BMSC 708 - Human Cell and Molecular Biology
- MCBA 710 - Topics in Gross Anatomy
- PHPH 701 - Physiology for Health Sciences

Elective Courses Include, but are not limited to:

- PHPH 750 - Fundamental Neuroscience I
- CHEM 752 - Regulation and Integration of Metabolism
- BMSC 705 - Medical Cell Biology II

[Effective Term: Spring 2013]

SCHOOL OF COMPUTING AND ENGINEERING
Electrical Engineering

Bulletin Change: APPROVED

From: Electrical Engineering, Ph.D. (60)

The general requirements for the Ph.D. degree are equivalent to those of The Graduate School. The course work requirement is established by the student’s committee, but a minimum of 60 hours (48 hours of course work and 12 of dissertation preparation) beyond the B.S. degree is required. The program of study has to be defined with the agreement of the student’s committee. Changes in the program of study are only allowed with the permission of the advisor and the Graduate Director. The changes have to be made at least one semester before the expected completion of the new program of study.

Degree Requirements (60 Post Baccalaureate Hours)

9 hours of elective coursework to be taken with proper advisement.

Ph.D. students performing research in the area of signal integrity are also required to complete 3 credit hours of:

ELCT 897 - Directed Individual Study

In the preparation of the program of study, the following
requirements also have to be considered:

A minimum of 15 credit hours must be completed in the research field.
A maximum of 12 hours of ELCT 797 - Research may be counted toward the Ph.D. degree.

Half of all credit hours, not including the dissertation preparation (ELCT 899), must be at the 700 level or above.

As a guideline, a typical program of study for the Ph.D. is:

Hours in the research field: 15 hours
Hours outside the department: 6 hours
Elective hours with advisement: 9 hours

Dissertation Preparation (12 Hours)

ELCT 899 - Dissertation Preparation

Hours in the research field (15 Hours)

Hours outside the department (6 Hours)

Research (12 Hours)

ELCT 797 - Research

Directed Individual Study (6 Hours)

ELCT 897 - Directed Individual Study

Additional Requirements

Students entering the Ph.D. program are required to pass a qualifying examination within 1.5 calendar years of initial enrollment in the program. The exam will be administered through oral questioning of the students by a group of professors. Questions will be based on the major areas of Electrical Engineering (i.e., Circuits & Electronics, Signals & System and Controls, Electromagnetics, and Semiconductor Devices). Details of the exam format and contents will be sent out to the concerned students well in advance of the exam. Students are allowed to take the qualifying exam only twice. For more information on the Qualifying exam, please visit http://www.ee.sc.edu/Grad/NewPhDQualifyingExam.pdf.

Before Ph.D. students can apply for graduation, they need to stay as “Ph.D. candidates” for at least one year. To become Ph.D. candidates, apart from passing the qualifying exam, they also need to have an approved Program of Study in their file with the Graduate School. All Ph.D. students are also required to present a dissertation proposal and a comprehensive exam preferably within three calendar years of initial enrollment in the program. The comprehensive examination, which can be in written or oral format,
or a combination of both, will focus on their specific research area, and be administered by their committee. The students must pass the comprehensive exam at least 3 months before they can apply for graduation.

To: Electrical Engineering, Ph.D. (60)

The general requirements for the Ph.D. degree in Electrical Engineering are equivalent to those of The Graduate School.

Coursework Requirements

Students entering the Ph.D. program with a B.S. degree are required to complete a minimum of 48 hours of course work and 12 hours of dissertation preparation. At least 24 hours of coursework must be the level of 700 or above.

Students entering into the Ph.D. program with an approved M.S. or M.E. degree are required to complete 18 hours of course work and 12 hours of dissertation preparation. At least nine hours of coursework must be at the level of 700 or above.

The Program of Study (POS) must be defined in consultation with the student's advisor and approved by the graduate director. Changes in the POS require permission of the student's advisor and approval of the Graduate Director. Any such changes must be approved before the beginning of a student's final semester.

Not more than 12 hours of ELCT 797 (Research) and not more than six hours of ELCT 897 (Directed Individual Study) may be approved. Ph.D. students conducting research in the area of Signal Integrity are required to complete three credit hours of ELCT 897.

Additional Requirements

Ph.D. Students must take and pass an oral Qualifying Examination within three academic semesters of initial enrollment in the program. The exam will be administered by a departmental committee for the purpose of ascertaining that the student has mastered the essentials of electrical engineering including the following major areas: Circuits and Electronics, Signals and Systems, Controls, Electromagnetics, and Semiconductor Devices. Details of the exam format and contents will be made available to the concerned students well in advance of the exam. Students are allowed to take the qualifying exam not more than twice.

Students must be admitted to Ph.D. Candidacy at least one year before graduation. Admission to candidacy requires passing the qualifying Exam and filing an approved Program of Study. Each Ph.D. student must write and present a dissertation proposal and have it approved by his/her advisory committee, which constitutes the Comprehensive Exam. The dissertation proposal and its
presentation must delineate the scope and depth of the original research that the student proposes to undertake.

[Effective Term: Fall 2013]


   No Report

12. Report of the Petitions and Appeals Committee (Erik Drasgow)

   No Report

13. Other Committee Reports

   No Report

14. Old Business

   No Report

15. New Business

   No Report

16. Good of the Order

17. Adjournment

   The meeting adjourned at 2:23 p.m.

       Murray Mitchell, Secretary

cc:
President Harris Pastides
Vice Provost & Dean of Graduate Studies Lacy Ford
Provost Michael Amiridis
Deans
Department Chairs
Graduate Directors
Aaron Marterer, University Registrar
Jodie Morris, Office of the Registrar
Andrew Graves, Office of the Registrar
Nancy Floyd, Office of Institutional Assessment and Compliance