Engineering Faculty Document No. 04-06

August 30, 2006

To: Faculty of the Schools of Engineering

From: The Faculty of Weldon School of Biomedical Engineering

Subject: New Graduate Level Course - BME 691 Critical Literature Assessment in Biomedical

Engineering

The Faculty of the Weldon School of Biomedical Engineering has approved the following new course and submits it for your approval.

BME 691 Critical Literature Assessment in Biomedical Engineering.

Sem. 1, 2, and SS. Class 1, Cr. 1.

May be repeated for credit.

Prerequisite: Consent of instructor.

Course Description: Literature relating to a current research topic in Biomedical Engineering is presented, reviewed, and critically analyzed using a Socratic method. Course topics may address bioelectricity, bioinstrumentation, biomaterials, biomechanics, bionanotechnology, computational and systems biology, medical and molecular imaging, neural engineering, or tissue engineering. At least four credits in different areas are required of Ph.D. candidates.

Reasons: The Weldon School of Biomedical Engineering (BME) has recently reformed graduate training requirements to include assessment of critical literature as an important required skill. This course addition will allow for consistent training in literature reviewing skills to be developed particularly by first-year PhD students in BME. Each semester several separate courses addressing a variety of BME related research topics will be offered. This will ensure that our students are knowledgeable of the breadth of activities within the field.

| Requested by: | | Date: | |
|---------------|--------------------------------|-------|--|
| Title | Head of Biomedical Engineering | | |

BME 691 Critical Literature Assessment in Biomedical Engineering.

Supporting Documentation:

Person-In-Charge: Andrew O. Brightman

Level: Graduate – typically first-year PhD students

Credit: 1

Class: Typically meets 1 time per week for 50 minutes (16 weeks) or for 100 minutes (8

weeks).

Course Objective: Students will be able to consistently and critically review technical literature in biomedical engineering and related fields and apply the information gained to their doctoral research and thesis and related technical writing.

Required text: Assigned literature in the specified area of biomedical engineering.

Assessment: Based on attendance, individual oral presentation of article review, and participation in group discussions.