DEPARTMENT: Biomedical Engineering  
EFFECTIVE SESSION: Fall 2007

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

1. New course with supporting documents  
2. Add existing course  
3. Expiration of a course  
4. Change in course number  
5. Change in course title  
6. Change in course credit type  
7. Change in course attributes  
8. Change in instructional hours  
9. Change in course description  
10. Change in course requisites  
11. Change in semesters offered  
12. Transfer from one department to another

PROPOSED:  
Subject Abbreviation: BME  
Course Number: 691 alpha

Long Title: Critical Literature Assessment in Biomedical Engineering  
Short Title: Crit Lit Assess in BME

Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)

CREDIT TYPE
1. Fixed Credit: Cr. Hrs: 1
2. Variable Credit Range: Minimum Cr. Hrs:  
   (Check One) To Maximum Cr. Hrs:  
3. Equivalent Credit: Yes  
4. Thesis Credit: Yes

COURSE ATTRIBUTES: Check all That Apply
1. Pass/Not Pass Only  
2. Satisfactory/Unsatisfactory Only  
3. Repeatable  
4. Credit by Examination  
5. Designator Required  
6. Special Fees

Instructional Type: Lecture  
Minutes Per Mtg: 100 or 50  
Meetings Per Week: 1  
Weeks Offered: 8 or 16  
% of Credit Allocated: 100  
Delivery Method: Asyn, Or Syn  
Delivery Medium: Audio, Internet, Live, Text-Based, Video

TERMS OFFERED: Check All That Apply
- Summer X  
- Spring X  
- Fall X

CAMPUS(ES) INVOLVED
- Calumet
- Indianapolis
- W. Lafayette
- Tech Statewide

7. Registration Approval Type  
   Department: X  
   Instructor: X

8. Variable Title
9. Remedial
10. Honors
11. Full Time Privilege
12. Off Campus Experience

Cross-Listed Courses:  

COURSE DESCRIPTION (INCLUDE REQUISITES):
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, biotechnology, computational and systems biology, medical and molecular imaging, neural engineering, or tissue engineering. At least four credits are required of PhD candidates. Prerequisite is consent of instructor.

OFFICE OF THE REGISTRAR
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.