

DEPARTMENT Biomedical Engineering

EFFECTIVE SESSION

Fall 2007

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

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

PROPOSED:

EXISTING:

TERMS OFFERED  
Check All That Apply:  
Summer  Spring  Fall

CAMPUS(ES) INVOLVED  
Calumet  Ft. Wayne   
Indianapolis  N. Central   
W.Lafayette  Cont Ed   
Tech Statewide

Subject Abbreviation BME Subject Abbreviation \_\_\_\_\_  
Course Number 691 alpha Course Number \_\_\_\_\_  
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  Or   
Maximum Cr. Hrs \_\_\_\_\_  
3. Equivalent Credit: Yes  No   
4. Thesis Credit: Yes  No

COURSE ATTRIBUTES: Check all That Apply

1. Pass/Not Pass Only   
2. Satisfactory/Unsatisfactory Only   
3. Repeatable   
Maximum repeatable credit: \_\_\_\_\_  
4. Credit by Examination   
5. Designator Required   
6. Special Fees

7. Registration Approval Type

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

Instructional Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated	Delivery Method (Asyn. Or Syn)	Delivery Medium (Audio, Internet, Live, Text-Based, Video)
Lecture	100 or 50	1	8 or 16	100	Syn	Live
Recitation						
Presentation						
Laboratory						
Lab Prep						
Studio						
Distance						
Clinic						
Experiential						
Research						
Ind. Study						
Pract/Observ						

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, bionanotechnology, 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.

Calumet Undergrad Curriculum Committee _____ Date	Calumet Department Head _____ Date	Calumet School Dean _____ Date
Fort Wayne Department Head _____ Date	Fort Wayne School Dean _____ Date	Fort Wayne Chancellor _____ Date
Indianapolis Department Head _____ Date	Indianapolis School Dean _____ Date	<i>Mechanoltuski</i> 2/7/08 Undergrad Curriculum Committee _____ Date
North Central Department Head _____ Date	North Central Chancellor _____ Date	Date Approved by Graduate Council _____
<i>Ego R. Wodulka</i> 2/7/07 West Lafayette Department Head _____ Date	<i>Ma... 2/7/07</i> West Lafayette College/School Dean _____ Date	Graduate Council Secretary _____ Date
Graduate Council Area Committee Chair _____ Date	Graduate Dean _____ Date	West Lafayette Registrar _____ Date

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

August 30, 2006

**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.

APPROVED FOR THE FACULTY  
OF THE SCHOOLS OF ENGINEERING  
BY THE COMMITTEE ON  
FACULTY RELATIONS

CFR Minutes 5

Date 9/29/06

Chairman CFR \_\_\_\_\_