TO: The Faculty of the College of Engineering

FROM: The Faculty of the School of Biomedical Engineering

RE: Change to Undergraduate-Level Course BME 25600 prerequisites

The faculty of the School of Biomedical Engineering has approved the change in prerequisites of the course listed below. This action is now submitted to the Engineering Faculty with a recommendation for approval.

FROM: BME 25600  Physiological Modeling in Human Health
Term offered: Spring, Lecture 3, Cr. 3
Restriction: Must be enrolled in the School of Biomedical Engineering (BME)
Prerequisites: BIOL 23000 and CS 15900 and (PHYS 24100 or PHYS 27200)
Concurrent Prerequisites: MA 26200 or MA 26600

Description: Introduction to the physiology and medicine underlying practical problems in biomedical engineering, especially with respect to medical device development. Engineering skills taught and practiced within the context of human disease, injury, and illness on extended problem sets which include mathematical modeling and problem solving with appropriate documentation. Main physiological systems of focus are cardiovascular, pulmonary, and renal, and common afflictions thereof.

TO: BME 25600  Physiological Modeling in Human Health
Term offered: Spring, Lecture 3, Cr. 3
Restriction: Must be enrolled in the School of Biomedical Engineering (BME)
Prerequisites: BIOL 23000 and (PHYS 24100 or PHYS 27200)
Concurrent Prerequisites: CS 15900 and (MA 26200 or MA 26600)

Description: Introduction to the physiology and medicine underlying practical problems in biomedical engineering, especially with respect to medical device development. Engineering skills taught and practiced within the context of human disease, injury, and illness on extended problem sets which include mathematical modeling and problem solving with appropriate documentation. Main physiological systems of focus are cardiovascular, pulmonary, and renal, and common afflictions thereof.

Reason: Changing CS 15900 to a concurrent prerequisite thereby allowing students to take the class either before or simultaneously with BME 25600.

George R. Wodicka, Professor and Head
Weldon School of Biomedical Engineering

APPROVED FOR THE FACULTY OF THE SCHOOLS OF ENGINEERING BY THE ENGINEERING CURRICULUM COMMITTEE
ECC Minutes *12
Date 4/19/2013
Chairman ECC
**PURDUE UNIVERSITY**
**REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE (10000-49999 LEVEL)**

**DEPARTMENT**: Biomedical Engineering  
**EFFECTIVE SESSION**: Spring 2014  
**PROPOSED**:

1. New course with supporting documents  
2. Add existing course offered at another campus  
3. Expiration of a course  
4. Change in course number  
5. Change in course title  
6. Change in course credit type

**EXISTING**:

Subject Abbreviation: BME  
Course Number: 24600  
Long Title: Physiological Modeling in Human Health  
Short Title: Physiological Modeling

**TERMS OFFERED**:

- Summer
- Fall
- Spring

**CAMPUS(ES) INVOLVED**:

- Calumet
- Cont Ed
- Ft. Wayne
- Indianapolis
- N. Central
- Tech Statewide
- W. Lafayette

**CREDIT TYPE**

<table>
<thead>
<tr>
<th>Credit Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fixed Credit: Cr. Hrs.</td>
<td>3.0</td>
</tr>
<tr>
<td>2. Variable Credit Range: Minimum Cr. Hrs.</td>
<td>To</td>
</tr>
<tr>
<td>maximum Cr. Hrs.</td>
<td>3. Equivalent Credit: Yes</td>
</tr>
</tbody>
</table>

**COURSE ATTRIBUTES**

- Pass/Not Pass Only
- Satisfactory/Unsatisfactory Only
- Repeatable
- Maximum Repeatable Credit: 4. Credit by Examination
- 5. Special Fees
- Instructor
- 6. Registration Approval Type
- 7. Variable Title
- 8. Honors
- 9. Full Time Privilege
- 10. Off Campus Experience

**COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):**

Term offered: Spring, Lecture 3, Cr. 3. Restriction: Must be enrolled in the School of Biomedical Engineering (BME). Prerequisites: BIOL 23000 and (PHYS 24100 or PHYS 27200). Concurrent Prerequisites: CS 15900 and (MA 26200 or MA 36000). Description: Introduction to the physiology and medicine underlying practical problems in biomedical engineering, especially with respect to medical device development. Engineering skills taught and practiced within the context of human disease, injury, and illness on extended problem sets which include mathematical modeling and problem solving with appropriate documentation. Main physiological systems of focus are cardiovascular, pulmonary, and neural and common afflications thereof.

**COURSE LEARNING OUTCOMES:**

**Cross-Listed Courses**

**RECEIVED**

**APR 2, 2013**

**OFFICE OF THE REGISTRAR**

**39-13**

**EFD 39-13**