Office of the Registrar
FORM 40 REV. 11/09

PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

Print Form

EFD 770

DEPARTMENT Biomedical Engineering

EFFECTIVE SESSION Fall 2011

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

- [ ] 1. New course with supporting documents
- [ ] 2. Add existing course offered at another campus
- [ ] 3. Expiration of a course
- [ ] 4. Change in course number
- [X] 5. Change in course title
- [ ] 6. Change in course credit/type
- [X] 7. Change in course attributes (department head signature only)
- [ ] 8. Change in instructional hours
- [ ] 9. Change in course description
- [X] 10. Change in course requisites
- [ ] 11. Change in semesters offered (department head signature only)
- [ ] 12. Transfer from one department to another

PROPOSED:	EXISTING:
Subject Abbreviation BME	Subject Abbreviation BME
Course Number 20500	Course Number 205
Long Title Biomolecular and Cellular Systems Laboratory	
Short Title Biomolec & Cellular Syst Lab	

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

TERMS OFFERED
Check All That Apply:
[ ] Summer [X] Fall [ ] Spring

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

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 [ ]

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. Special Fees [ ]
6. Registration Approval Type: Department [ ] Instructor [ ]
7. Variable Title [ ]
8. Honors [ ]
9. Full Time Privilege [ ]
10. Off Campus Experience [ ]

ScheduleType	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated
Lecture				
Recitation				
Presentation				
Laboratory	150	1	16	
Lab Prep				
Studio				
Distance				
Clinic				
Experiential				
Research				
Ind. Study				
Pract/Observ				

Cross-Listed Courses

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):
Fall, Lab 3, Cr.1. Major Restriction: BME Only. Co-requisite: BIOL 23000 and BME 20100
Description: Introductory laboratory experience focused on engineering concepts and practices in the analysis of biomolecules and cells. Topics include fundamental quantitative techniques of analysis, methods of isolation, identification, and quantification of biomolecules and cells, and analysis of integrated biosystems. Concludes with student-driven design project.

*COURSE LEARNING OUTCOMES:
1. Independently describe the theoretical basis of, and put into practice, fundamental analytical tools and techniques used in the isolation, characterization, and quantification of biomolecules and cells. 2. Collect, record, process, statistically analyze, and report experimental data related to the analysis of biomolecules and cells in an accurate and understandable manner. 3. Conceptually design a simple analytical method and/or tool for solving a medically-relevant problem based upon detection/analysis of a specific biomolecular or cellular related abnormality.

Calumet Department Head	Date	Calumet School Dean	Date
Fort Wayne Department Head	Date	Fort Wayne School Dean	Date
Indianapolis Department Head	Date	Indianapolis School Dean	Date
North Central Department Head	Date	North Central Chancellor	Date
West Lafayette Department Head: Gary R Woodside	10/18/10	West Lafayette College/School Dean	10/20/10
West Lafayette Registrar	Date: 11/8/10		

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EFD 170

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EFFECTIVE SESSION Fall 2011

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(Check One) To [ ] Or [ ]
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Maximum Repeatable Credit: [ ]
4. Credit by Examination [ ]
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Department [ ] Instructor [ ]
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North Central Department Head	Date	North Central Chancellor	Date
West Lafayette Department Head 10/18/10	Date	West Lafayette College/School Dean 10/20/10	Date
		West Lafayette Registrar	Date

OFFICE OF THE REGISTRAR

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Engineering Faculty Document No. 7-10

March 25, 2010

TO: The Faculty of the College of Engineering

FROM: The Faculty of the School of Biomedical Engineering

RE: Changes in Undergraduate-Level Course, BME 20500 Biomedical Engineering Laboratory I, title and requisites

The Faculty of the School of Biomedical Engineering has approved the following changes to an existing course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

From: **BME 20500 Biomedical Engineering Laboratory I**
Term offered: Fall, Lab 3, Cr. 1
Prerequisite: CHM 11600, CS 15600, ENG 10600, and MA 16600, or equivalent
Corequisite: BIOL 29500E, BME 20100

This course is an introductory laboratory experience that focuses on engineering concepts and practices used in the analysis of biomolecules and cells. Topics include fundamental quantitative techniques of analysis, methods of isolation, identification, and quantification of biomolecules and cells, and analysis of integrated biosystems. The course concludes with a student-driven design project.

To: **BME 20500 Biomolecular and Cellular Systems Laboratory**
Term offered: Fall, Lab 3, Cr. 1
Restriction: Must be enrolled in the School of Biomedical Engineering (BME)
Co-requisite: BME 20100
Concurrent prerequisite: BIOL 23000

Description: Introductory laboratory experience focused on engineering concepts and practices in the analysis of biomolecules and cells. Topics include fundamental quantitative techniques of analysis, methods of isolation, identification, and quantification of biomolecules and cells, and analysis of integrated biosystems. Concludes with student-driven design project.

Reason: To provide a more descriptive course title for the students. The change in co-requisite reflects the new permanent number for the Biology course. A restriction is employed since this is a limited space laboratory course. This restriction, along with the co-requisite BME 20100, negates the need to list prerequisites on this course as well.

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 #26

Date 5/13/2010

ECC R Pinnt