

DEPARTMENT Biomedical Engineering

DATE SUBMITTED 4/19/04

DATE EFFECTIVE 1/5/05

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

PURPOSE

- | | |
|---|---|
| <input type="checkbox"/> 1. Deletion of a course | <input type="checkbox"/> 8. Change in semesters offered |
| <input checked="" type="checkbox"/> 2. New course with supporting documents | <input type="checkbox"/> 9. Change in course credit/type |
| <input type="checkbox"/> 3. Add existing course offered at another campus | <input type="checkbox"/> 10. Change in course attributes |
| <input type="checkbox"/> 4. Change in course number at same level | <input type="checkbox"/> 11. Change in instructional hours |
| <input type="checkbox"/> 5. Downgrading of course level | <input type="checkbox"/> 12. Change in prerequisites |
| <input type="checkbox"/> 6. Upgrading of course level | <input type="checkbox"/> 13. Change in description of course content |
| <input type="checkbox"/> 7. Change in course title | <input type="checkbox"/> 14. Transfer of course from one dept. to another |

EXISTING:

PROPOSED:

SEMESTERS OFFERED

Subject Abbreviation ~~BME~~ Subject Abbreviation BME
 Course Number ~~595~~ Course Number 541
 Proposed Title Biomedical Fluid Dynamics
 Variable Title Yes No

Check All That Apply.
 Summer Fall Ag Winter Spring

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

CROSS LISTED COURSES

CREDIT TYPE

COURSE ATTRIBUTES: Check All That Apply.

1. Fixed Credit: Cr. Hrs. 3.0
 2. Variable Credit Range:
 Minimum Cr. Hrs. Or
 (Check One) To Maximum Cr. Hrs.
 3. Equivalent Credit: Yes No
 4. Thesis Credit: Yes No

1. Pass/Not Pass Only
 2. Repeatable for Credit
 3. Available for Credit by Examination
 4. Designator Required
 5. Special Fees
 6. Approval Required for Enrollment
 Department
 Instructor

Instructional Type	Class Hours	FTE	Instructional Type	Class Hours	FTE	Instructional Type	Class Hours	FTE	CAMPUS(ES) INVOLVED
Primary	3.0		Auto-tutorial			Thesis			<input type="checkbox"/>
Secondary			Ind. Study			Observation			<input type="checkbox"/>
Laboratory			Clinic			Mats Based			<input type="checkbox"/>
Lab. Prep.			Experiential						<input checked="" type="checkbox"/>

COURSE DESCRIPTION (PREREQUISITES INCLUDED):

Prerequisites: Senior or Graduate standing; ME309 or equivalent. (Offered in alternate years.)
 Advanced principles of convective diffusion of fluids pertaining to the body, particularly vascular circulation. Topics include blood flow in arteries, convective and diffusion boundary layers in internal flows with reactive and/or permeable walls, Brownian motion, blood rheology, transport in blood, mass transport to the arterial wall, and fluid dynamics of vasculature in physiological and pathological conditions.

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>Robert J. Montgomery</i> 10/20/04 Undergrad Curriculum Committee	Date
North Central Department Head	Date	North Central Vice Chancellor	Date	APPROVED 1/20/05 Date Approved by Graduate Council	
<i>George R. Wodchuk</i> 10/19/04 West Lafayette Department Head	Date	<i>Wah H. Jui</i> 10/22/04 West Lafayette School Dean	Date	<i>Marilyn D. Heist</i> 2/2/05 Graduate Council Secretary	Date
<i>Richard A. ...</i> 1/20/05 Graduate Area Committee Convener	Date	Graduate Dean	Date	<i>Debra K. Sheets</i> West Lafayette Registrar	Date

