

DEPARTMENT Agricultural and Biological Engineering

DATE SUBMITTED 5/9/01

DATE EFFECTIVE Summer '01

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 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 checked="" type="checkbox"/> | 12. Change in prerequisites |
| <input type="checkbox"/> | 6. Upgrading of course level | <input checked="" 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:
Subject Abbreviation <u>ABE</u>	Subject Abbreviation <u>ABE</u>
Course Number <u>210</u>	Course Number <u>210</u>
Proposed Title <u>Biological Applications of Material and Energy Balances</u>	
Variable Title Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Abbreviated Title <u>Biol App Mat Energy Bal</u>	
Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)	

SEMESTERS OFFERED

Check All That Apply.

Summer <input type="checkbox"/>	Fall <input type="checkbox"/>	Ag Winter <input type="checkbox"/>	Spring <input checked="" type="checkbox"/>
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CROSS LISTED COURSES	CREDIT TYPE	COURSE ATTRIBUTES: Check All That Apply.
_____	1. Fixed Credit: Cr. Hrs. <u>3</u>	1. Pass/Not Pass Only <input type="checkbox"/>
_____	2. Variable Credit Range:	2. Repeatable for Credit <input type="checkbox"/>
_____	Minimum Cr. Hrs. _____	3. Available for Credit by Examination <input type="checkbox"/>
_____	(Check One) To <input type="checkbox"/> Or <input type="checkbox"/>	4. Designator Required <input type="checkbox"/>
_____	Maximum Cr. Hrs. _____	5. Special Fees <input type="checkbox"/>
_____	3. Equivalent Credit: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	6. Approval Required for Enrollment <input type="checkbox"/>
_____	4. Thesis Credit: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Department _____
		Instructor _____

<u>Instructional Type</u>	<u>Class Hours</u>	<u>FTE</u>	<u>Instructional Type</u>	<u>Class Hours</u>	<u>FTE</u>	<u>Instructional Type</u>	<u>Class Hours</u>	<u>FTE</u>	CAMPUS(ES) INVOLVED
Primary	3		Auto-tutorial			Thesis			Calumet <input type="checkbox"/>
Secondary			Ind. Study			Observation			Fort Wayne <input type="checkbox"/>
Laboratory			Clinic			Matis Based			Indianapolis <input type="checkbox"/>
Lab. Prep.			Experiential						North Central <input type="checkbox"/>
									West Lafayette <input checked="" type="checkbox"/>
									Off Campus <input type="checkbox"/>

COURSE DESCRIPTION (PREREQUISITES INCLUDED):

Sem. 2. Class 3, cr. 3. Prerequisite: CHM 116, CS 152 or CS 156, PHYS 152, or equivalent.

Applications of material and energy balances to biological and engineering systems; development of a framework for the analysis of biological systems from an engineering perspective. Introduction to applications of the first and second laws of thermodynamics to biological and mechanical engineering systems. Topics include refrigeration systems, power cycles, energy conversion systems, and environmental impacts of energy production.

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 <u>C.D. Sutton</u> Date Appr. for Faculty #944 C.D. Sutton, Chair 2/14/01
Indianapolis Department Head _____ Date	Indianapolis School Dean _____ Date	Undergrad Curriculum Committee _____ Date
North Central Department Head _____ Date	<u>Paul A. Brandt</u> 5/10/01 North Central Vice-Chancellor Dean-Ag _____ Date	Date Approved by Graduate Council _____
West Lafayette Department Head _____ Date	<u>J. J. Duggan</u> 2/27/01 West Lafayette School Dean of Engr _____ Date	Graduate Council Secretary _____ Date <u>Debra Shoetsch</u>
Graduate Area Committee Convener _____ Date	Graduate Dean _____ Date	West Lafayette Registrar <u>7/20/01</u> Date