

EFD-28-03

PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF A COURSE

DEPARTMENT Agricultural & Biological Engineering

EFFECTIVE SESSION Fall 2004

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

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

PROPOSED:

Subject Abbreviation ABE
Course Number 201

Long Title Thermodynamics in Biological Systems I

Short Title Thrmodyn in Bio Sys I

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

EXISTING:

Subject Abbreviation
Course Number

TERMS OFFERED
Check All That Apply:
Summer Fall Spring

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

CREDIT TYPE

1. Fixed Credit: Cr. Hrs. 3
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	50	3	16	100	Syn	Live
Recitation						
Presentation						
Laboratory						
Lab Prep						
Studio						
Distance						
Clinic						
Experiential						
Research						
Ind. Study						
Pract/Observ						

COURSE DESCRIPTION (INCLUDE REQUISITES):

Prerequisite: CHM 116 or equivalent; Co-requisite(s): BIO 295E, BIO 295F. Thermodynamic principles associated with biological systems and processing of biological materials. Emphasis on the first law of thermodynamics. Fundamentals of steady-state mass and energy balances for reacting and non-reacting processes including multiple unit operations emphasizing living systems and bioprocessing. Applications of the first law conservation of energy to biological systems, energy conversion systems, and the environmental impacts of energy production. Development of engineering problem solving skills via MathCad and MatLab software.

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 Elton Gomey</i> 4/23/04	Date
North Central Department Head	Date	North Central Chancellor	Date	Undergrad Curriculum Committee	Date
<i>Thomas J. ...</i> 4-8-04	Date	<i>Tracy H. ...</i> 5/3/04	Date	Date Approved by Graduate Council	
Vest Lafayette Department Head	Date	West Lafayette School Dean	Date	Graduate Council Secretary	Date
Graduate Area Committee Convener	Date	Graduate Dean	Date	<i>Debra Sheets</i> 5/4/04	Date
				West Lafayette Registrar	Date