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

DEPARTMENT
SCHOOL OF CHEMICAL ENGINEERING

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

X
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

PROPOSED:

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th>Subject Abbreviation</th>
<th>CHE</th>
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<tbody>
<tr>
<td>Course Number</td>
<td>Course Number</td>
<td>517</td>
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Long Title
MICRO/NANOSCALE PHYSICAL PROCESSES

Short Title
MICRO/NANO PHYS PROCS

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

COURSE ATTRIBUTES: Check All That Apply.

1. Pass/No Pass Only
2. Satisfactory/Unsatisfactory Only
3. Repeatability
4. Credit by Examination
5. Designator Required
6. Special Fees

CREDIT TYPE
1. Fixed Credit: Cr. Hrs.
2. Variable Credit Range:
   Minimum Cr. Hrs
   Maximum Cr. Hrs
3. Equivalent Credit: Yes
4. Thesis Credit: Yes

Instructional
Type
Act
Per Min
Weeks
Of Credit
Allocated
Credit
SYN

Present
Lab
Prep
Studio
Distance
Clinic
Research
Ind. Study
Prac/Observ

TERMS OFFERED
Check All That Apply:
Summer
Fall
Spring

CAMPUS(ES) INVOLVED
Calumet
Fort Wayne
Indianapolis
W. Lafayette
Tech Statewide

COURSE DESCRIPTION (INCLUDE REQUISITES):

CHE 517-Micro/Nanoscale Physical Processes (ME 517) Sem. 2. Class 3, cr. 3. Prerequisite: CHE 377 and CHE 378 or equivalent, or consent of instructor.

• Study of physical processes encountered in small scale systems like Micro-Electromechanical Systems (MEMS) and nanoscience.

Introduction of tools for micron to molecular scale analysis of statics, dynamics, electricity and magnetism, thermal phenomena, fluid dynamics, heat transfer, and mass transfer. Quantitative analysis of specific MEMS devices using finite element analysis.

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

Undergrad Curriculum Committee Date

APPROVED 4/22/04

Indianapolis Department Head Date

Indianapolis School Dean Date

North Central Department Head Date

North Central Chancellor Date

Graduate Area Committee Chair Date

West Lafayette Department Head Date

West Lafayette School Dean Date

Graduate Dean Date

West Lafayette Registrar Date

OFFICE OF THE REGISTRAR