

DEPARTMENT School of Nuclear Engineering

DATE SUBMITTED 12/00/00 DATE EFFECTIVE 01/01/2001

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 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 NUCL Course Number 510

Subject Abbreviation \_\_\_\_\_ Course Number \_\_\_\_\_

SEMESTERS OFFERED

Check All That Apply.

Summer  Fall  Ag Winter  Spring

Proposed Title \_\_\_\_\_

Variable Title Yes  No

Abbreviated Title \_\_\_\_\_

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

CROSS LISTED COURSES

CREDIT TYPE

- Fixed Credit: Cr. Hrs. 3
- Variable Credit Range:  
Minimum Cr. Hrs \_\_\_\_\_  
(Check One) To \_\_\_\_\_ Or \_\_\_\_\_  
Maximum Cr. Hrs \_\_\_\_\_
- Equivalent Credit: Yes  No
- Thesis Credit: Yes  No

COURSE ATTRIBUTES: Check All That Apply.

- Pass/Not Pass Only
- Repeatable for Credit
- Available for Credit by Examination
- Designator Required
- Special Fees
- Approval Required for Enrollment

Department \_\_\_\_\_  
Instructor \_\_\_\_\_

Instructional Type  
Primary  
Secondary  
Laboratory  
Lab. Prep.

Class Hours 3

FTE \_\_\_\_\_

Instructional Type  
Auto-tutorial  
Ind. Study  
Clinic  
Experiential

Class Hours \_\_\_\_\_

FTE \_\_\_\_\_

Instructional Type  
Thesis  
Observation  
Matis Based

Class Hours \_\_\_\_\_

FTE \_\_\_\_\_

CAMPUS(ES) INVOLVED

Calumet  
Fort Wayne  
Indianapolis  
North Central  
West Lafayette  
Off Campus

COURSE DESCRIPTION (PREREQUISITES INCLUDED):

Sem. 1. Class 3, cr. 3. Prerequisite: NUCL 501 or equivalent.

Methodologies of neutron flux calculations, diffusion and slowing down theory, flux separation, material buckling, resonance absorption, Doppler effect, 2-group and multi-group theories, reactivity balances for design and operation. Introduction to reactor kinetics, delayed neutrons, point reactor kinetics, transient behavior, load changes, reactivity feedback, safety implications.

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 C.D. Sutton #944  
Appr. for Faculty \_\_\_\_\_ Date \_\_\_\_\_  
C.D. Sutton, Chair \_\_\_\_\_ 2/14/01

Indianapolis Department Head \_\_\_\_\_ Date \_\_\_\_\_ Indianapolis School Dean \_\_\_\_\_ Date \_\_\_\_\_ Undergrad Curriculum Committee \_\_\_\_\_ Date \_\_\_\_\_

North Central Department Head \_\_\_\_\_ Date \_\_\_\_\_ North Central Vice Chancellor \_\_\_\_\_ Date \_\_\_\_\_ Date Approved by Graduate Council \_\_\_\_\_

West Lafayette Department Head G. B. Bennett 12-7-00 \_\_\_\_\_ Date \_\_\_\_\_ West Lafayette School Dean L. J. Wiegman 2/6/01 \_\_\_\_\_ Date \_\_\_\_\_ Graduate Council Secretary Marilyn D. Heist 6/27/01 \_\_\_\_\_ Date \_\_\_\_\_

Graduate Area Committee Convener \_\_\_\_\_ Date \_\_\_\_\_ Graduate Dean \_\_\_\_\_ Date \_\_\_\_\_ West Lafayette Registrar Debra Shuto 6/29/01 \_\_\_\_\_ Date \_\_\_\_\_