Office of the Registrar FORM 40 REV. 12/03

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

1/04, EFD21-03 Biomedical Engineering EFFECTIVE SESSION DEPARTMENT INSTRUCTIONS: Please check the items below which describe the purpose of this request New course with supporting documents Change in course attributes Add existing course offered at another campus 8. Change in instructional hours 2. Change in course description 3. Expiration of a course q Change in course number Change in course requisites 5. Change in course title Change in semesters offered 6. Change in course credit/type PROPOSED: **EXISTING:** TERMS OFFERED Check All That Apply: BME Subject Abbreviation Subject Abbreviation Fall Y Spring 301 Course Number Course Number CAMPUS(ES) INVOLVED Long Title Bioelectricity Calumet Fort Wayne Indianapolis N. Central Short Title W.Lafayette Cont Ed Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY) Tech Statewide CREDIT TYPE COURSE ATTRIBUTES: Check All That Apply. 3 1, Pass/Not Pass Only 7. Registration Approval Type 1.Fixed Credit: Cr. Hrs. Department 2. Variable Credit Range: 2. Satisfactory/Unsatisfactory Only Instructor 3. Repeatable Variable Title Minimum Cr. Hrs Maximum repeatable credit: Remedial (Check One) To 4. Credit by Examination 10. Honors Maximum Cr. Hrs 11. Full Time Privilege Equivalent Credit: Yes Nο 5. Designator Required Thesis Credit: Νo 6. Special Fees 12. Off Campus Experience Yes % of Credit Delivery Medium(Audio, Internet, Instructional Minutes Meetings Weeks Delivery Method Per Week Allocated (Asyn. Or Syn.) Live, Text-Based, Video) Type Per Mtg Offered Lecture 16 50 3 !ecitation Presentation. □ Laboratory Lab Prep Studio Distance Clinic Experiential Research Ind. Study Pract/Observ COURSE DESCRIPTION (INCLUDE REQUISITES): Sem. 1. Class 3, cr. 3., Prerequisite: PHYS 241 and MA 166, or equivalent, Corequisite: BME 305 or ECE 202 Fundamentals of bioelectricity of the mammalian nervous system and other excitable tissues. Passive and active forms of electric signals in both the single cell and cell-cell communication, tissue and systemic bioelectricity, mathematical analysis including Nernst equation, Goldman equation, linear cable theory, and Hodgkin-Huxley Model of action potential generation and propagation. Calumet School Dean Date Date Calumet Undergrad Curriculum Committee Date Calumet Department Head Date Date Fort Wayne School Dean For Wayne Chancel Fort Wayne Department Head Date 10/04 Date Indianapolis School Dean Date Undergrad Curriculum Commi Indianapolis Department Head North Central Chancellor Date Date Approved by Graduate Council Date 04 09 West Lafayette School Dean Date Date Graduate Council Secretary Ver Lafayette Department Head Graduate Area Committee Convener Date Graduate Dean Date West Lafavette Registrar Date

FEB 2 3 2004

ADMINISTRATION

The sand while