### UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Office of the Provost and Vice Chancellor for Academic Affairs

Swanlund Administration Building 601 East John Street Champaign, IL 61820



August 29, 2001

Susan A. Lamb, Chair Senate Committee on Educational Policy Office of the Senate 228 English Building, MC-461

Dear Professor Lamb:

Enclosed are copies of a proposal from the College of Engineering for a Minor in Physics.

This proposal has been approved by the Engineering Executive Committee and the Dean; it now requires Senate review.

Sincerely,

Keith A. Marshall Assistant Provost

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KAM/ab

c: J. Sullivan

D. Padua

B. Trimble

## UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

College of Engineering

Executive Committee 306 Engineering Hall, MC-266 1308 West Green Street Urbana, IL 61801



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August 1, 2001

OFFICE of the PROVOST

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Keith Marshall 207 Swanlund MC-304

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GRADUATE COLLEGE

Dear Asst. Provost Marshall.

The attached Minor in Physics has been unanimously approved by The College of Engineering Faculty at its Spring 20001 meeting.

Enclosed is the original copy of the request.

Sincerely,

Mark Spong, Secretary Executive Committee

Male Gonz

Approval Recommended:

D. E. Daniel, Dean

Date

College of Engineering

Enclosures

cc:

J. Sullivan.

D. Padua

B. Trimble

#### UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Executive Committee College of Engineering 306 Engineering Hall 1308 W. Green Street Urbana, IL 61801

# Approved Minutes Executive Committee Meeting May 2, 2000

Present: D. E. Carlson (TAM); J. A. Dantzig (M&IE); M. J. Kushner (ECE); K. D. Lee (AAE); R. I. Masel (ChemE); D. A. Padua (CS); D. A. Pecknold (CEE); R. L. Pershing (Admin); M. B. Salamon (Physics); D. L. Thurston (GE)

Absent: R. A. Axford (NE); D. L. Jones (CSL); J. Kieffer (MatSE); J. F. Reid (AgE); W. R. Schowalter, (Chair)

Guests: R. Blahut (new ECE representative), Y. Oono (Chair, Engineering-Math Liaison Committee)

- 1. Meeting was called to order at 1:20 p.m.
- 2. The Vice Chair reviewed the responsibilities of the Executive Committee.
- 3. The minutes were approved as amended.
- 4. Old Business
- The responses from R. Buckius and D. Daniel on the proposed Interdisciplinary Engineering Science degree were discussed. ExComm will await a report from the IES subcommittee before deciding on further action. This will be an early item of business for the Fall, 2000 Executive Committee.
- The draft statement on policy for the Research Technology Management Office was discussed with Bruce Vojak, and incorporated comments from ExComm members. A subcommittee (Jones, Dantzig, and Kushner) will refine the statement and discuss its content with RTMO. It was noted that both a subcommittee of the Campus Budget Policy Committee and the so-called Washington Group would also be looking at RTMO issues.
- A revised version of the report Climate for Women Faculty in Engineering is appended to the minutes of the April 25 meeting. Copies will be distributed to the Administrative Committee and the Provost's office.
- 1. New Business
- Two course proposals from the Department of Physics were considered.
  - A proposed minor in Physics was approved.
  - Following the decision to remove fluid statics and dynamics from the course description of Physics 113, *Thermal Physics*, the department submitted a revised outline for Physics 111, *Mechanics*. On the advice of ExComm, the static properties

### UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

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APR 19 2000

DEAN'S OFFICE
COLLEGE OF ENGINEERING

Department of Physics Loomis Laboratory of Physics 1110 West Green Street Urbana, IL 61801-3080

April 18, 2000

Myron Salamon, Secretary Executive Committee College of Engineering

Dear Myron:

Attached is a proposal for a Minor in Physics, which I am submitting for approval by the Executive Committee of the College of Engineering.

The minor was developed by the Physics Undergraduate Studies Committee in accordance with the Senate Guidelines for Campus-wide Undergraduate Minors (copy attached) and was approved by the Faculty of the Department of Physics at its April 10 meeting.

The Minor in Physics will be of particular interest to students in the College of Engineering who seek a deeper understanding of physical science than is provided by the introductory level physics sequence. The structure and flexibility of the proposed minor most closely resembles the existing Minor in Chemistry.

The Senate Guidelines do not require any further approvals at the college level beyond the signature of the Dean. The next stop after the College is the Senate Educational Policy Committee, by way of the Office of the Provost. Any questions about the proposal should be referred to Jeremiah D. Sullivan, Chair, Physics Undergraduate Studies Committee.

Sincerely.

Assoc. Head for Undergraduate Programs

Enclosures:

Proposal to Establish a Minor In Physics Guidelines for Campus-wide Undergraduate Minors

#### PROPOSAL TO ESTABLISH A MINOR IN PHYSICS AT THE UNIVERSITY OF ILLINOS AT URBANA-CHAMPAIGN

Title: Minor in Physics

Sponsoring Unit: Department of Physics

Point of Contact: Gary E. Gladding

Date: March 15, 2000

**Brief Description:** The minor provides students an understanding of the basic areas of all of physics; intermediate level study of mechanics and special relativity; and an advanced level of understanding in one or two areas of physics with either a theoretical or experimental emphasis, or a combination of the two.

Requirements: The program requires students to complete 10 hours of the introductory physics sequence: PHYCS 111, 112, and 113 or 114 (10 hrs), PHYCS 225 (3 hrs), and any two 300-level physics courses (6-10 hrs), with the exception of PHYCS 319.

Prerequisites: No special prerequisites beyond the math courses that are listed as prerequisites for the chosen physics courses. In practice, this means MATH 120, 130, 242, 280, and 285, and, in some cases, MATH 315. Some 300-level physics courses list other 300-level physics courses as prerequisites. Such prerequisites will be waived for students who demonstrate that they possess the necessary knowledge.

Expected Enrollment in the Minor: The minor is expected to attract students primarily from engineering, mathematics, and other technical curricula who seek a deeper understanding of physical science than is provided in the introductory level physics sequence. An enrollment of at least 50 appears likely, but the number could exceed 100.

Admission to the Minor: A member of the physics faculty will monitor admission to the minor with the help of a staff member of the Office of the Associate Head of Physics for Undergraduate Programs.

Minor Advisor: The same faculty member who monitors admission to the minor will serve as the advisor for students in the minor.

Certification of Successful Completion: The Department of Physics will maintain records for all students enrolled in the minor and will certify successful completion to the respective college offices.

#### Statement for the Catalog

#### MINOR IN PHYSICS

Physics and technology go hand in hand, with physics providing the foundation for a broad range of technical fields. This minor is intended to encourage students to expand their understanding of physics beyond the introductory level, to deepen their understanding of fundamental principles, and to enhance their ability to keep abreast of an ever-changing technological world. Depending on the choice of 300-level physics courses, a total of 19-23 hours is required.

Requirements: PHYCS 111, 112, and 113 or 114 (10 hrs), PHYCS 225 (3 hrs), and any two 300-level physics courses (6-10 hrs), with the exception of PHYCS 319.

(Prepared by Jeremiah D. Sullivan, Chair, Physics Undergraduate Studies Committee)

Clearances:

David K. Campbell, Head Department of Physics Date: 4/18/00

Date: 8/1/01

William R. Schowalter, Dean

College of Engineering