

5.284

SIMON FRASER UNIVERSITY

MEMORANDUM

SENATE CASE #
E-65 50

Mr. H.E. Evans	From B.L. Funt
Secretary of Senate	Dean of Science
Subject Graduate Courses in Physics	Date Sept. 24/69

The following Graduate Courses in Physics were considered by the Faculty of Science at its meeting of September 22nd and were approved.

The main intent is to indicate the range and content of material which had previously been presented in Special Topics courses.

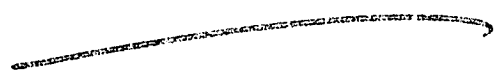
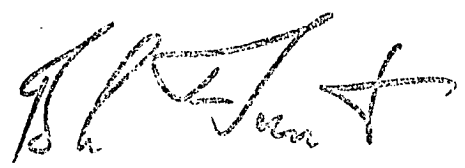
The Department has given this Faculty the assurance that the competence to teach these courses is available within the Department, and that no special budgetary considerations apply.

It should be emphasized that it is not intended to offer many of these courses in any given semester. Instead, they delineate the areas of graduate education available within the Department. The scheduling will be attempted in a manner to give maximum education flexibility within the financial constraints.

In addition to the description of the courses, the Department has included the copy for calendar revision, which would result from these changes.

/ma

encl.



APPROVED BY THE EXECUTIVE COMMITTEE OF THE SENATE COMMITTEE ON GRADUATE STUDIES OCTOBER 7, 1969.

H.M. EVANS
Secretary of Senate

FACULTY OF SCIENCE4. ii) Report of the Graduate Studies Committeea) Special Topics Courses in Physics

Background: The courses listed represent an attempt to specify, for the benefit of graduate students, those special areas of competence in the Department of Physics in which graduate course work may be obtained.

Analysis: The courses have already been approved by the Graduate Studies Committee. The pattern of explicit statement of course content is one which, in my opinion, should be encouraged and is in keeping with recent calendar revisions in the Department of Mathematics and elsewhere.

Recommendation: That these special topics courses be approved for submission to Senate.

B. L. Funt

Adopted by the Faculty of Science at its meeting of September 22, 1969

SIMON FRASER UNIVERSITY

MEMORANDUM

Dean Of Science

From K. E. Rieckhoff, Chairman
Grad. Studies Committee
Department of Physics

Subject

Date July 21, 1969

14733-PC

Enclosed is a list of graduate courses the department has the capability and desire to offer and to include in the calendar. I request that they be submitted to the Graduate Studies Committee of the Faculty of Science for appropriate recommendation to the Faculty and, if approved, there, for submission to Senate via the Senate Committee of Graduate Studies.

The new courses are all special topics courses, some of which have been offered in the past under that heading. Only between one and three of these courses will actually be given in any semester, i.e. it is not contemplated or even desired to increase the actual offerings in any semester beyond what is currently being done. Hence there are no budgetary implications. The listing of these courses in the graduate calendar would follow adopted policy in the Faculty of Science, in that it reflects the existing competence of faculty to teach these courses and allows graduate students to make specific requests for offerings.

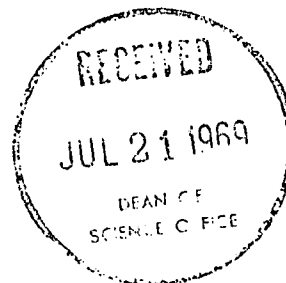
We wish to retain the present unspecified special topics courses to allow for temporary or visiting faculty to offer courses not explicitly contained within the special listing.

Your early action on this would be appreciated.

K. E. Rieckhoff
K. E. Rieckhoff

KER:ljb

Enclosure



New Special Topics courses for which the Department of Physics asks Faculty of Science and Senate approval together with a listing of those faculty members in the department who are currently on payroll (full-time) and have the required competence to teach these courses on the graduate level.

- 827-2 Quantum Electrodynamics
(D. Dunn, B. L. Jones)
- 831-2 Low Temperature Physics
(J. F. Cochran, S. Gygax, D. J. Huntley, L. H. Palmer)
- 832-2 Electron Diffraction and Electron Microscopy
(A. E. Curzon)
- 833-2 Recovery of Signals from Noise
(B. P. Clayman, K. Colbow, L. H. Palmer, K. E. Rieckhoff)
- 854-2 Topics in Laser Applications to Molecular Physics and Spectroscopy
(R. H. Enns, K. E. Rieckhoff)
- 855-2 Laser Physics
(J. C. Irwin, L. H. Palmer, K. E. Rieckhoff)
- 867-2 Magnetism in Metals and Alloys
(A. S. Arrott, P. H. Bly, K. S. Viswanathan)
- 868-2 Solid State Devices
(K. Colbow, R. R. Haering)
- 869-2 Thermoelectricity
(D. J. Huntley)
- 874-2 Reactor Physics
(A. S. Arrott)
- 875-2 Neutron Scattering
(A. S. Arrott)
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- 884-2 Application of Group Theory to Physics
(L. E. Ballentine, R. R. Haering, K. S. Viswanathan)
- 885-2 Quantum Fluids
(S. Gygax, K. S. Viswanathan)

- 886-2 Fermi Surfaces
(J. F. Cochran, R. R. Haering)
- 887-2 Many Body Problems: Green's Function Techniques
(L. E. Ballentine, B. L. Jones, K. S. Viswanathan)
- 888-2 Advanced Mathematical Methods for Physicists
(Integral equations, variational methods and eigenvalue problems, dispersion theory, spectral representation of operators, fundamental properties of special functions)
(D. Dunn, K. S. Viswanathan)
- 889-2 Topics in Biophysics
(K. Colbow, B. L. Jones, L. H. Palmer)
- 890-2 Transport Theory
(L. E. Ballentine, D. Dunn, R. H. Enns, R. R. Haering, B. L. Jones, K. S. Viswanathan)
- 891-2 Electron-Phonon Interaction
(D. Dunn, R. R. Haering, B. L. Jones)
- 892-2 Fermi Liquid Theory
(D. Dunn, B. L. Jones)

Calendar change request by the Department of Physics for the Graduate Studies Calendar.

on bottom of page 118 delete from 881-2 to bottom of page instead add the following:

Following is a listing of special topics courses (ending with 892-2) offered by the department. In any semester only a very limited number from this listing will be offered depending on demand and availability of faculty. Permission of the instructor is prerequisite for these courses.

- 827-2 Quantum Electrodynamics
- 831-2 Low Temperature Physics
- 832-2 Electron Diffraction and Electron Microscopy
- 833-2 Recovery of Signals from Noise
- 854-2 Topics in Laser Applications to Molecular Physics and Spectroscopy
- 855-2 Laser Physics
- 867-2 Magnetism in Metals and Alloys
- 868-2 Solid State Devices
- 869-2 Thermoelectricity
- 874-2 Reactor Physics
- 875-2 Neutron Scattering

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- 881-2 Special Topics I. (not otherwise listed)
 - 882-2 Special Topics II (not otherwise listed)
 - 883-2 Special Topics III (not otherwise listed)
 - 884-2 Application of Group Theory to Physics
 - 885-2 Quantum Fluids
 - 886-2 Fermi Surfaces
 - 887-2 Many Body Problems: Green's Function Techniques

Calendar change request continued

2.

- 888-2 Advanced Mathematical Methods for Physicists
- 889-2 Topics in Biophysics
- 890-2 Transport Theory
- 891-2 Electron-Phonon Interaction
- 892-2 Fermi Liquid Theory
- 898 M.Sc. Thesis
- 899 Ph.D. Dissertation

on top of page 116 in the Table of Tentative Course Offerings for
Fall Semester 1969 replace: 881-2 by: Special Topics
and for

Spring Semester 1970 replace: 882-2, 883-2 by: Special Topics