SIMON FRASER UNIVERSITY

S.81-27

MEMORANDUM

To Senate	From Office of the Dean of Graduate Studies
Subject New Graduate Course Proposals	Date November 18, 1980

MOTION: That Senate approve and recommend approval to the Board, as set forth in S.81-27 - New Graduate Course Proposals, BISC 811-3 and 861-3.

These changes were approved by the Executive Committee of the Senate Graduate Studies Committee on November 17, 1980.

Bryan P. Beirne
Dean of Graduate Studies

bjr
attachs.

SIMON FRASER UNIVERSITY

MEMORANDUM

M. McGinn Assistant Registrar Graduate Studies	From N. Heath Assistant to the Dean Faculty of Science
Subject NEW GRADUATE COURSE PROPOSALS	Date 1980 10 21

At the meeting of 1980 10 20, the Faculty of Science passed the following motion:

> *That the new course proposals, BISC 811-3, Cell and Molecular Biology and BISC 861-3, Advanced Studies in Cell and Molecular Biology, be approved and forwarded to the Senate Graduate Studies Committee and Senate for consideration and approval.*

The course proposal forms, outlines and information concerning the Library collection are attached.

N. Heath

NH/mgj
Attachments

New Graduate Course Proposal Form

1. **CALENDAR INFORMATION:**

Department: Biological Sciences Course Number: BISC. 811-3

Title: Cell and Molecular Biology

Description: The methods and approaches for studying DNA structure, transcription and translation will be critically reviewed. Selected modern studies in cell and molecular biological interest will be examined in detail.

Credit Hours: 3 Vector: 3-0-0 Prerequisite(s) if any: Permission of Instructor

2. **ENROLLMENT AND SCHEDULING:**

Estimated Enrollment: 5/year When will the course first be offered: 81-1

How often will the course be offered: 1/year

3. **JUSTIFICATION:**

Cell and molecular biology is one of the areas of emphasis in the Department attracting graduate students with these research interests and/or molecular genetics. The Department offered several "Special Topics" courses in this subject area in 1977-1, 1977-2 and 1979-3 and wishes to formalize some of them for more regular offering. This course may also be of interest to any emergent biochemistry graduate program.

4. **RESOURCES:**

Which Faculty member will normally teach the course: Drs. Michael J. Smith and David L. Baillie

What are the budgetary implications of mounting the course: nil

Are there sufficient Library resources (append details): See attached memo (M. Deutsch)

Appended: a) Outline of the Course
b) An indication of the competence of the Faculty member to give the course
c) Library resources

Approved: Departmental Graduate Studies Committee: Date: 8 May 1980

Faculty Graduate Studies Committee: Date: 24 Sept 80

Faculty: Date: Oct. 21/80

Senate Graduate Studies Committee: Date: Nov 19, 1980

Senate: Date:

Outline of Proposed Course - Cell and Molecular Biology BISC. 811

The purpose of this course will be to introduce at a graduate level the topic of cell and molecular biology. Classical studies which demonstrate specific phenomena will be reviewed. Following this introduction, the student will be presented with modern studies and methodologies which probe DNA structure and function. Examples of the topics to be covered are:

1. Review of DNA, RNA, and protein structures.
2. Prokaryote and Eukaryotes: differences and similarities at a molecular biological level.
3. Nucleases, polymerases, and other enzymes of interest.
4. DNA replication and synthesis.
5. RNA synthesis, transcription and regulation.
6. Protein synthesis: translational mechanisms and their control.
7. Plasmids, phages, and recombinant DNA.

F-80-22

New Graduate Course Proposal Form

1. **CALENDAR INFORMATION:**

Department: Biological Sciences Course Number: BISC. 861-3

Title: Advanced studies in Cell and Molecular Biology

Description: Contemporary basic studies in cell and molecular biology will be examined in detail. The current research literatures on topics such as DNA structure, transcriptional and translational mechanisms and their regulation, will be critically assessed.

Credit Hours: 3 Vector: 3-0-0 Prerequisite(s) if any: Permission of Instructor

2. **ENROLLMENT AND SCHEDULING:**

Estimated Enrollment: 5/year When will the course first be offered: 81-3

How often will the course be offered: 1/year

3. **JUSTIFICATION:**

Cell and molecular biology is one of the areas of emphasis in the Department attracting graduate students with these research interests and/or molecular genetics. The Department offered several "Special Topics" courses in this subject area in 1977-1, 1977-2 and 1979-3 and wishes to formalize some of them for more regular offering. This course will be a continuation of BISC. 8XX (Cell and Molecular Biology).

4. **RESOURCES:**

Which Faculty member will normally teach the course: Drs. Michael J. Smith and David L. Baillie

What are the budgetary implications of mounting the course: Nil

Are there sufficient Library resources (append details): See attached memo (M. Deutsch)

Appended: a) Outline of the Course
b) An indication of the competence of the Faculty member to give the course
c) Library resources

Approved: Departmental Graduate Studies Committee: Robert C. Brooke Date: 8 July 1980

Faculty Graduate Studies Committee: Robert C. Brooke Date: 24 September 1980

Faculty: [signature] Date: Oct. 21/80

Senate Graduate Studies Committee: [signature] Date: Nov 19, 1980

Senate: Date:

Outline of Proposed Course - Advanced Studies in Cell and Molecular Biology - BISC. 861

The intent of this course is to examine in detail current cell and molecular biological research. This course will be a continuation of BISC. 8XX (Cell and Molecular Biology). The rate of progress in these research areas is phenomenal at this time. Consequently it is impossible to specify the topics to be covered. The areas of the literature covered will be concerned with DNA structure and its relationship to transcription and transcriptional regulation, translational mechanisms and their control, and emergent technologies such as plasmid, phage, and recombinant DNA studies.

SIMON FRASER UNIVERSITY

MEMORANDUM

To. Mike Smith	From. Maurice Deutsch
Biology	Sciences - Library
Subject.	Date. 80/07/09

With regard to the proposed courses:

Bioscience 811 Cell and Molecular Biology
Bioscience 861 Advanced Studies in Cell and Molecular Biology

the Library's book, journal, and index/abstract collections can adequately support graduate and post graduate research and study in the areas of cell and molecular biology.

Ma

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