

UNIVERSITY AT
ALBANY
STATE UNIVERSITY OF NEW YORK

Office of the President
518 442-5400

May 21, 1991

Administration 246
Albany, New York
12222

TO: William A. Lanford
Chair, University Senate

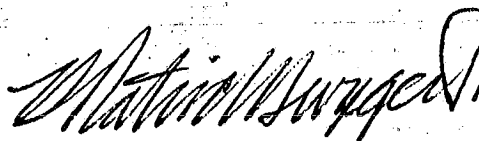
In accordance with your memorandum of May 14, 1991, I am pleased to indicate my approval of the following Senate bills.

Senate Bill No. 9091-11: Special Talent Admission Program

Senate Bill No. 9091-12: Interdisciplinary Undergraduate Major in Biochemistry and Molecular Biology

Senate Bill No. 9091-13: Interdisciplinary Undergraduate Major in Japanese Studies

Senate Bill No. 9091-14: Policy on Allocation of University-Wide Authoring Stations



H. Patrick Swygert
President

UNIVERSITY AT
ALBANY
STATE UNIVERSITY OF NEW YORK

Office of the President
518 5400

May 21, 1991

Administration 246
Albany, New York
12222

TO: Jeanne Gullahorn
Interim Executive Vice President for Academic Affairs

I have approved the following Senate bills and am forwarding them to you for implementation or other action as appropriate.

Senate Bill No. 9091-11: Special Talent Admission Program

Senate Bill No. 9091-12: Interdisciplinary Undergraduate Major in Biochemistry and Molecular Biology

Senate Bill No. 9091-13: Interdisciplinary Undergraduate Major in Japanese Studies

Senate Bill No. 9091-14: Policy on Allocation of University-Wide Authoring Stations



H. Patrick Swygert
President



UNIVERSITY AT ALBANY
STATE UNIVERSITY OF NEW YORK

TO: H. Patrick Swygert
President

FROM: Jeanne E. Gullahorn
Interim Executive Vice President
for Academic Affairs

DATE: May 16, 1991

SUBJECT: Senate Bills 9091-11 - 9091-14

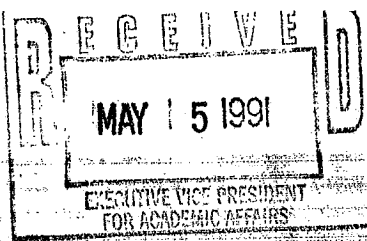
I have reviewed these bills with Dean Kim, and we see no problem with them. I, therefore, recommend their approval.

RECEIVED

MAY 16 1991

**OFFICE OF THE
PRESIDENT**

UNIVERSITY AT
ALBANY
STATE UNIVERSITY OF NEW YORK



Office of the President
518 442-4000

May 14, 1991

Administration 246
Albany, New York
12222

TO: Jeanne Gullahorn
Interim Executive Vice President for Academic Affairs

The following Senate bills have been submitted to me for approval. Please review them and submit any comments to me. Thank you.

Senate Bill No. 9091-11: Special Talent Admission Program

Senate Bill No. 9091-12: Interdisciplinary Undergraduate Major in Biochemistry and Molecular Biology

Senate Bill No. 9091-13: Interdisciplinary Undergraduate Major in Japanese Studies

Senate Bill No. 9091-14: Policy on Allocation of University-Wide Authoring Stations

A handwritten signature in cursive script, appearing to read "H. Patrick Swygert".

H. Patrick Swygert
President

UNIVERSITY AT
ALBANY
STATE UNIVERSITY OF NEW YORK

University Senate
518 442-5406

TO: H. Patrick Swygert
President

FROM: William A. Lanford
Chair



DATE: May 14, 1991

Administration 259
Albany, New York
12222

In accordance with Senate procedures, I am submitting the following bills to you for approval. The bills were approved at the May 6, 1991, University Senate meeting.

Senate Bill No. 9091-11: Special Talent Admission Program

Senate Bill No. 9091-12: Interdisciplinary Undergraduate Major in Biochemistry and Molecular Biology

Senate Bill No. 9091-13: Interdisciplinary Undergraduate Major in Japanese Studies

Senate Bill No. 9091-14: Policy on Allocation of University-Wide Authoring Stations

Approved: 5/14/91

W. Patrick Swygert

UNIVERSITY SENATE

UNIVERSITY AT ALBANY
STATE UNIVERSITY OF NEW YORKINTERDISCIPLINARY UNDERGRADUATE MAJOR
IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

INTRODUCED BY: Undergraduate Academic Council

DATE: April 22, 1991

A1. Program of Studies: Degree Requirements for the Interdisciplinary Major in Biochemistry and Molecular Biology — 65 credits are required in major coursework for a B.S. degree in biochemistry and molecular biology. These credits will be earned by taking and passing the prescribed courses in biology, chemistry, mathematics and physics which are listed below. (Course number, credits, and name are listed.)

Bio 110F, N, 111N, 210, 211	16	Introductory Biology (core sequence offered annually)
Bio 312	3	Molecular Biology (offered annually)
Bio 313	2	Molecular Biology/Biochemistry Laboratory (offered annually)
Bio 365, 366	6	Biochemistry (offered annually, 366 to be offered after Spring 1991)
Chm 120N, 121N	6	Introductory Chemistry (core course offered annually)
Chm 122a, b	2	Introductory Chemistry Laboratory (offered annually)
Chm 216a, b	6	Organic Chemistry (core course offered annually)
Chm 217a, b	2	Organic Chemistry Laboratory (offered annually)
Chm 330a, b	6	Biophysical Chemistry (new course to be offered Fall 1991)
Phy 120N, 124N	8	Physics I and II (core course offered annually)
Mat 112Y, 113Y	8	Calculus (core course offered annually)
<u>Total required credits:</u>	<u>65</u>	

A2. Program of Studies: Recommended Courses

Bio 301a, b, 302a, b	Cell Biology I and II and Laboratory
Bio 314, 315	General Bacteriology and Laboratory
Bio 399, 499 or	
Chm 424, 425, 426	Independent Research
Chm 225	Quantitative Analysis
Chm 420a	Inorganic Chemistry
Chm 430	Instrumental Analysis
Csi 201	Introduction to Computer Science
Csi 204	Scientific Computing
Phy 220	Physics III
Phy 122, 126	Problem Solving for Physics I and II

B1. Objectives of the Major — Biochemistry and molecular biology are areas of rapid development in science today. Students with training in these fields can pursue careers as researchers in academic or industrial settings or they can pursue further study in graduate or professional schools. Currently, students at the University at Albany can take courses which will train them in these areas, but this training is not recognized as a distinct major. Because advanced courses in both chemistry and biology are required for this major, recognition of the student's effort in taking the more rigorous courses is desired. We propose to satisfy this need by offering an undergraduate degree in biochemistry and molecular biology. This program of study will require basic courses in both biology and chemistry and will prepare the student for advanced studies in these areas.

B2. Requirements for Admission — Students must complete 40 graduation credits before application to the program. Students must obtain approval of the program director before officially declaring this interdisciplinary major.

The program will be under the direction of a program director and the core faculty, who may make recommendations to the director. The director will assume responsibility for coordination of the major and will be chosen annually by the core faculty, with the approval of the Dean of the College of Science and Mathematics. Core faculty will consist of any faculty member who wishes to be associated with the program and is approved by the current core faculty.

C. Courses And The Frequency With Which They Are Offered — Please see Section A above.

D. Independent Study And Project Work — Independent study and advanced research are available in both departments (Bio 499 and Chm 426) and are recommended for students pursuing graduate work. Students may apply to work in the laboratories of any core faculty member or other members of these departments.

E. New Courses — Three new courses will be required to introduce this major:

1. Bio 365, Biological Chemistry I: This course has already been approved and will be coordinated by Dr. Jacquelyn Fetrow in the Fall 1990. This is now a required course for all biology majors. The course will be tailored to fit the needs of this program, but will continue to satisfy the needs of both chemistry and biology majors.

2. Bio 366, Biological Chemistry II: A biochemistry major requires a complete, basic course in biochemistry, an objective which cannot be accomplished in a one semester course. The sequence of Bio 365 and Bio 366 as a complete biochemistry course will fulfill this requirement.

3. Chm 330a, b, Biophysical Chemistry: This will be a physical chemistry course with an emphasis on biological problems. This course will be taught by Dr. Charles Scholes in the chemistry department.

F. Available Resources — Current courses in biochemistry and molecular biology have ensured that books and journals found in the University library are current and sufficient. Additionally, the libraries at the School of Public Health and Albany Medical College are available to these students.

G. Curricula Vitae — The administration of the program will be in the College of Science and Mathematics. Vitae of faculty most closely associated with the program are attached:

Jacquelyn Fetrow, Assistant Professor, Department of Biological Sciences
 David Shub, Professor, Department of Biological Sciences
 Peter Snow, Assistant Professor, Department of Biological Sciences
 Henry Tedeschi, Professor, Department of Biological Sciences
 Richard Zitomer, Professor, Department of Biological Sciences
 Charles Scholes, Professor, Department of Chemistry
 Qash Myer, Professor, Department of Chemistry
 Harry Frisch, Professor, Department of Chemistry
 Ramaswamy Sarma, Professor, Department of Chemistry

Catalog Description

Faculty-initiated Interdisciplinary Major with a Concentration in
 Biochemistry and Molecular Biology

Objectives of the Major: Biochemistry and molecular biology are areas of rapid development in science today. Students with training in these fields can pursue careers as researchers in academic or industrial settings or they can pursue further study in graduate or professional schools. This program of study will require basic courses in both biology and chemistry and will prepare the student for advanced studies in these areas.

Requirements for Admission: Students must complete 40 graduation credits before application to the program, generally in the Spring of the sophomore year. Students must obtain approval of the program director before officially declaring this interdisciplinary major.

Degree Requirements for the Interdisciplinary Major in Biochemistry and Molecular Biology: 65 credits are required for a B.S. degree in biochemistry and molecular biology. These credits will be earned by taking and passing the prescribed courses in biology, chemistry, mathematics and physics which are listed below.

<u>Course Number</u>	<u>Cre</u>	<u>Course Name</u>
Bio 110F, N, 111N, 210, 211	16	Introductory Biology (core Sequence offered annually)
Bio 312	3	Molecular Biology (offered annually)
Bio 313	2	Molecular Biology/Biochemistry Laboratory (offered annually)
Bio 365, 366	6	Biochemistry (offered annually, 366 to be offered after Spring 1991)
Chm 120N, 121N	6	Introductory Chemistry (core course offered annually)
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Chm 330a, b	6	Biophysical Chemistry (new course to be offered Fall 1991)
Phy 120N, 124N	8	Physics I and II (core course offered annually)
Mat 112Y, 113Y	8	Calculus (core course offered annually)
Total Required Credits:	65	

Recommended Curriculum:

Freshman Year: Bio 110, 111, Chm 120, 121
 Sophomore Year: Chm 216a, 216b, Bio 210, 211, Mat 112Y, 113Y
 Junior Year: Phy 120N, 124N, Bio 365 and 366 or Bio 312 and 313
 Senior Year: Chm 330a, 330b, Bio 365 and 366 or Bio 312 and 313

Recommended Courses: Below is a list of courses which are recommended, but not required, for this major. Selection of courses will depend on the student's interests and future goals. The student is encouraged to talk to the Program Director for advisement in selection of these courses.

Bio 301a, b, 302a, b
Bio 314, 315
Bio 399, 499 or
Chm 424, 425, 426
Chm 225
Chm 420a
Chm 430
Csi 201
Csi 204
Phy 220
Phy 122, 126

Cell Biology I and II and Laboratory
General Bacteriology and Laboratory

Independent Research
Quantitative Analysis
Inorganic Chemistry
Instrumental Analysis
Introduction to Computer Science
Scientific Computing
Physics III
Problem Solving for Physics I and II

