

To:

The Honorable the Members of the Board of Regents

From:

Valerie Grey

Subject:

Master Plan Amendment: ℃UNY Baruch College to award a Bachelor

of Arts (B.A.) degree in the Biological Sciences

Date:

July 5, 2011

Authorizations:

SUMMARY

Issue for Decision (Consent Agenda)

Should the Board of Regents approve a master plan amendment for The City University of New York to authorize Baruch College to offer its first baccalaureate program in the disciplinary area of biological sciences?

Reason for Consideration

Required by State regulation.

Proposed Handling

The question will come before the full Board at its July 2011 meeting, where it will be voted on and action taken.

Background Information

The City University of New York seeks master plan amendment to authorize Baruch College to offer a B.A. program in Biological Sciences. Master plan amendment is needed because the program would be the College's first baccalaureate program in the biological sciences disciplinary area. Baruch College offers baccalaureate and master's programs in the major disciplinary areas of business, education, fine arts, health professions, humanities, physical sciences, and social sciences.

<u>Purpose</u>: The purpose of the proposed program is to prepare students to enter graduate programs in the biological sciences, including the areas of molecular and cellular biology, organism and evolutionary biology, environmental biology, and conservation biology and, more generally, serve students with educational and career objectives in

health care. The program would build on Baruch's extensive course offerings in the natural sciences and on the substantial enrollments in these courses.

<u>Curriculum and Academic Resources</u>: The proposed curriculum includes completion of a core sequence of six science courses in biology, chemistry and physics as prerequisites to the major. All students accepted into the major are required to complete courses in genetics and statistics and five additional courses (20 credits) related to their area of specialization within the biological sciences. The program of 120 credits also includes a general education core of 54 credits. All science courses include a laboratory component. Students in the major will have an opportunity to do research.

The College's Natural Sciences Department has over 20 doctorally qualified faculty with strong research backgrounds. A substantial number of this group are faculty members of CUNY doctoral programs. The Natural Sciences Department has recently hired four ecologists. If program enrollment grows as anticipated, the College will supplement this full-time group with adjuncts for laboratory instruction and additional needed course sections.

The College has in place a plan to increase and improve space for instruction in biology through renovation of an existing building. Faculty are involved in the facility planning. The plan includes provision for additional dedicated research labs for faculty as well as general labs for teaching.

Students: The estimated enrollment for the program is 19 in the first year (four freshman and 15 beginning as upper-division students) rising to 32 by the fifth year. These estimates are based on the number of students currently taking intermediate and advanced science courses. Admission of freshmen will be selective and will include successful completion of math and science courses in high school and an average of at least 81 in academic subjects.

Need: The College's examination of student interest and enrollments in science courses indicated substantial student interest in biology based careers. In addition, Baruch's students have had long and substantial record of advanced study in distinguished graduate and professional schools in the fields of medicine, dentistry, physical and occupational therapy, optometry, veterinary medicine, biophysics, and biology. The Bureau of Labor Statistics estimates employment growth in biology-related fields between 2010 and 2018 to be:

•	biological scientists	+21%
•	medical scientists	+40%
•	occupational therapists	+26%
•	physical therapists	+30%
•	dentists	+16%
•	physicians	+22%
•	veterinarians	+33%

Estimated growth of 20 percent or more is "much faster than the average" under the Bureau of Labor Statistics scale. The average estimated percent of growth for all occupations, 2010-2018, is 7-13 percent.

<u>Canvass Results</u>: The Department received responses from seven institutions; none objected to the proposed program.

<u>Department Review</u>: The Department has determined that the proposed program, if approved, meets the standards for registration set forth in the Regulations of the Commissioner of Education.

Recommendation

It is recommended that the Board of Regents approve the amendment to the master plan of The City University of New York authorizing Baruch College to offer its first baccalaureate program in the disciplinary area of biological sciences (Biological Sciences, B.A.). The amendment will be effective until July 31, 2012, unless the Department registers the program prior to that date, in which case master plan amendment will be without term.