

Biological Sciences Department

Status of the Graduate Program

a report to the Faculty

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This brief report on the Graduate Program is provided in an attempt to keep the faculty fully informed. The Graduate Program is critical to the faculty's efforts as educators and scientists, and it is hoped that this information is helpful in those efforts. Your comments on this report (especially with respect to how it can be improved) are welcome, and should be directed to David Moriarty.

Enrollment

As of September 19, 1996, the program has 58 classified graduate students and eight conditional students (Table 1 (*not available in web version*)). These numbers fluctuate continually as students enter and leave the program. It is important to realize that not all of these students enroll in classes (supervisory or traditional) every quarter. Some students take formal leaves of absence, and many graduate students are adept at "stopping out" for a quarter without losing their enrollment.

Since the program started in the fall of 1969, enrollment has grown at the rate of approximately 0.7 students/year (Fig. 1). This linear relationship, while simple and somewhat informative, is somewhat inappropriate due to the autoregressive and cyclical nature of the enrollment data. Enrollment in any one year is a function of enrollment in the previous year (i.e. time lag=1), but cannot be predicted by going further back in time (Box-Jenkins Autoregressive-Integrated Moving Average Modeling). Peaks of enrollment occur at intervals of approximately 4.4 years (Spectral Analysis; Box-Jenkins ARIMA Modeling).

The above analysis does indicate that the program has grown through time. The "carrying capacity" of the program is probably determined by the ability of the faculty to mentor graduate students for whom they serve as thesis advisor, an activity which faculty undertake without recognized compensation in time or budget from the department. Twenty-seven faculty members have opted to list themselves as part of the graduate faculty, therefore these 27 people have an average of just over 2 graduate students each. Without recognition of this activity in faculty workload, it is probably unrealistic to expect that this average would increase greatly. If the average were to go to 3 students per faculty member, the program would have 80 students, but that seems unlikely.

The 4.4 year cycle in enrollment is intriguing, but the meaning of the cycle (if there is one) is unclear. Anecdotally, one is tempted to relate this somehow to the length of time it takes students to complete their degrees. However, the "speculation to fact" ratio of this relationship is not favorable. Other interpretations of the cycle are welcome.

The Top 10 Graduate Programs by enrollment - Fall 95
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| <ol style="list-style-type: none">1. Master of Business Administration - 2812. MA Education - 983. MS Electrical Engineering - 784. MS Engineering - 765. Master of Architecture - 716. MA English - 617. Master of Urban & Regional Planning - 498. MS Biological Sciences - 479. MS Physical Education - 3910. MS Computer Science - 36 |
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Admissions

During the past year, the Graduate Admissions Committee (Baskin, Campbell, Moriarty) received about 50 applications. Over one-half of these applications were never completed and therefore never examined by the committee. Approximately 21 students were admitted to program.

The graduate program web page (<http://www.sci.csupomona.edu/biology/gradprog.htm>) gives the program a presence on the Internet, and this presence has had some impact. Requests for additional information are received by Email generated from the web page. In the past year, 94 "information packets" were mailed to prospective applicants. Most of these (81) were sent to domestic addresses, but 13 were distributed among 8 foreign countries, with the largest single number (4) going to the Peoples Republic of China.

The Graduate Admissions Committee has resolved to follow the admissions criteria that were established by the faculty. A brief comparison (attached) with other institutions (CSU San Bernardino, CSU Long Beach, Cal Poly SLO, and San Diego State) indicated that our admissions criteria are consistent with the comparison group. Enforcing admissions criteria is critical in maintaining the quality and value of the program.

Database

A Microsoft Access 2.0 database has been created to organize and track information on students in the program as well as applicants. The main table in the database (i.e. student data) contains 107 records, each consisting of 27 fields (see attached – **not available in web version**). It is now possible to generate letters and mailing labels to applicants and admitted students. The thesis committee for each classified student is tracked, and the database allows the generation of lists of student committees by faculty member (this listing was distributed to the faculty earlier in the quarter). The database also indicates whether the student has filed the Program of Courses (GS-101), so that "reminders" can be issued to students who are late in filing this important document.

World Wide Web Site (<http://www.sci.csupomona.edu/biology/gradprog.htm>)

The first page of the graduate program web site is attached (**not available in web version**). As can be seen by examination of the "bullet" items, the page provides information on the program, application procedures and requirements, degree

requirements, faculty (with links to home pages), courses, and teaching associateships. Links are also provided to the university catalog description, the departmental and the campus web sites. Therefore, the web site serves as a recruitment tool as well as a means of providing information to applicants and current students.

Additions to the web site planned for the future include links to graduate student personal pages and a section on graduate policies. The capability for students to publish their own home pages is a problem that has not yet been resolved at the university level. Some colleges and/or departments have already made efforts to provide students with the capability. The Biological Sciences Department is fortunate in that Curtis Clark has established a web server (<http://poppy.scx.csupomona.edu>) in his office, and taught graduate students to publish their own pages in his BIO 542L Graphic Techniques class.

Graduate policies are determined by the graduate committee (often with great effort) and approved by the faculty, but sometimes are lost or forgotten, particularly as membership on the graduate committee (including the graduate coordinator) changes. The establishment of a policies page on the web will hopefully provide a very public and easily accessible location, thereby assisting with "institutional memory."

Conclusion

The Biological Sciences Department graduate program has grown through the years and enrollment appears strong. However, limits to the growth are probably being approached, and the Department will undoubtedly have to continue to remind central administration that the nature of the research thesis program imposes these limits. The existence of a world wide web site and database increases the exposure of the program both on and off campus, provides for the dissemination of information in an efficient manner, and assists with the management of the program.

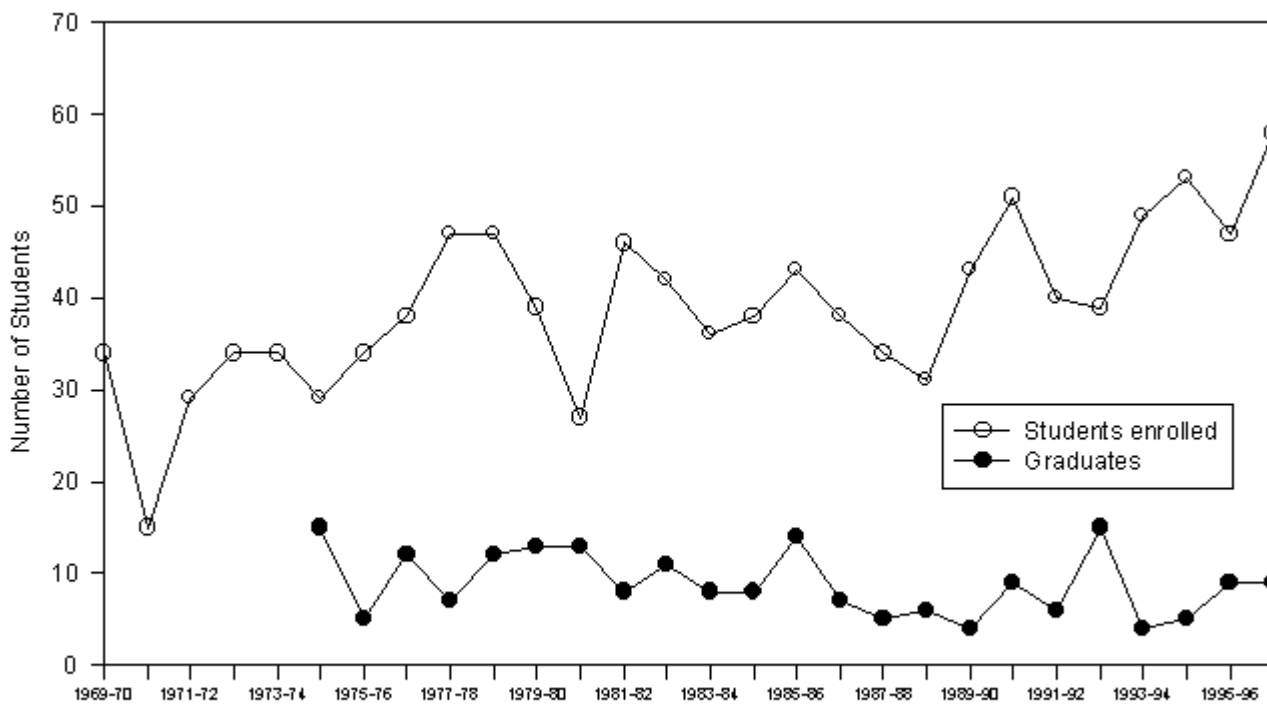


Fig. 1 Students enrolled in Fall Quarter from 1969-70 through 1996-97 (open circles), and students graduated from 1974-75 through 1996-97 (filled circles).