



PROGRAM REVIEW

Academic Programs

Biology 2011-12 through 2015-16 Submitted 2016-17

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Threats:

- Limited lab space to accommodate the influx of ECHS students and the two new programs
- Decreased funding due to potential budget cuts from the state
- Limited pool of adjuncts for daytime teaching
- Lack of sufficient number of full-time faculty and lab technicians
- There is a lack of tutoring offered at night and on weekends
- The district is currently transitioning to Advising Guides, which will focus on transferring students to 4-yr. institutions for advanced degrees, instead of graduating students with a particular field of study for the A.A. degree or the A.S. degree. Thus, the Biology Program should not expect to see any graduates with an A.S. degree, concentration in Biology or in Pre-Nursing in the future. There will simply be a generic A.S. degree.

Program Review Outcomes and Conclusions

1. Recommendations and Five-Year Goals:

Recommendations

- Request our own nursing program/more allied health programs. Our community should have accessibility to these
 programs without having to re-locate.
- Request that the Science Learning Center have weekend and evening hours. This may help improve the withdrawal rate and PGR.
- Request funding to replace extensively used laboratory equipment and materials such as microscopes, incubators, autoclaves, models.
- Hire new faculty to meet the increased enrollment of ECHS students.
- Increase lab space to meet the increased enrollment of ECHS students.
- Limit the number of committees on which faculty can serve.

Goals

- Limit the number of committees on which faculty can serve.
- Raise our overall cycle-review average for PGRs by 1% from 74% to 75%.
- Increase our overall cycle-review average for Retention Rates by 1% from 84% to 85% thus lowering the withdraw rate from 15.5% to 15%.
- Increase our overall cycle-review average for enrollment by 1.5% from 2,602 students per semester to 2,641.
- Faculty remain current and integrate most recent developments into their curriculum.
- Successfully incorporate ECHS while maintaining or improving PGR.
- Work with PAC Grants Development to submit competitive funding proposals.

2. Five-Year Action Plan:

- To support student success and to continue the upward trend in PGR, the following steps will be taken:
 - 1) Faculty will meet regularly to discuss the current strengths, weaknesses, opportunities, and threats related to student success.
 - 2) Faculty will continue to monitor PGR, failure rate, retention rate, and withdrawal rate of their courses.
 - 3) Faculty will continue to analyze, review, and revise action plans for high-risk courses.
 - 4) Faculty will continue to hold office hours in the Science Learning Center for tutoring and advising students.
 - 5) Faculty will continue to monitor and communicate with the Science Learning Center to stay aware of the supplies and mentoring techniques utilized by the Science Learning Center.
 - Faculty will continue to use Early Alert Systems and 4DX practices to actively communicate with at-risk students.

- 7) Faculty will petition administration to hire more tutors to staff the Science Learning Center at night and on the weekends.
- 8) Faculty will continue to monitor the current laboratory supplies and techniques in order to request and purchase new quality materials for our students so as to provide them with the most excellent and rewarding educational experience possible.
- 9) Faculty will try to maintain average class size (especially those courses with labs) at 24 to ensure appropriate faculty-to-student interaction.
- To ensure that the Biology Program maintains or improves PGR while successfully incorporating more ECHS students (and possibly two additional programs at PAC), the following steps will be taken:
 - Syllabi for each course that include ECHS students will be peer-reviewed to ensure clarity of course requirements and expectations.
 - Faculty will petition administration to hire more FT Biology faculty in order to manage the influx of more ECHS students and courses at PAC.
 - 3) Unit Plans will need increased funding for additional supplies for more ECHS Biology sections, and possibly more A&P sections needed by two more programs being offered at PAC (if the bond passes).
- To ensure that faculty remain current in pedagogy and technology and to integrate the most recent developments
 into their curriculum the following steps will be taken: Biology faculty will actively seek out a variety of faculty
 development opportunities including professional conferences, free podcasts and webinars, establishing
 communications with local industries, and visiting industries. Upon identifying an opportunity for faculty
 development, the faculty member will communicate the information to all faculty in the Biology Program.
- To help PAC Grants Development submit competitive funding proposals the following steps will be taken: Faculty
 will seek out opportunities for funding through professional affiliations and requests for proposals. Faculty will
 discuss opportunities with PAC Grants Development. If approval is given to proceed, faculty will assist PAC Grants
 Development in the development grant proposal and implementation if the proposal is successful.
- Also, if current grants become funded, faculty will implement new research and presentation opportunities for Biology students to introduce the professional and publishing aspect of science.
- Faculty will continue to provide an up-to-date and rigorous curriculum that will prepare students for the next phase of their higher-level or professional education.