

Full-Time Faculty Position Request Form 2017 - 2018

This form is used by departments and programs to request new or unfilled faculty positions relying on Program Review and/or other justifications. Submit one form for each position requested. For multiple positions, indicate priority of request (e.g., Subject Position 1, Subject Position 2, etc.). Forms are due to Division Deans by September 16, 2016.

Position Requested:

Contact Person:

Discipline/Division: Starting Term: Fall Spring

This form requires the use Enrollment Management Tool data, which can be found at the following link: <http://www.laspositascollege.edu/researchandplanning/FacultyPrioritization.php> (If you have any questions about the data, please contact Rajinder Samra 925-424-1027 or rsamra@laspositascollege.edu) or your Dean. The data will be verified by the Dean. Do not attach data spreadsheets.

Check if position is a: Replacement or New

If replacement: What is the position code? (see Dean)

Name of the person being replaced:

Length of time position(s) unfilled:

CRITERIA

1. Number of Full-Time Faculty currently in Discipline:
If requesting more than one position, add 1 to this number for each subsequent position requested.
2. Percentage of FTEF taught by full-time faculty as load for the past six semesters, and projected for one year assuming a successful hire. (Use data from link above. If requesting more than one position, see Rajinder Samra to determine the projected numbers.)

Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	<u>Projected</u>	Fall 2017	Spring 2018
<input type="text" value="29"/>	<input type="text" value="32"/>	<input type="text" value="44"/>	<input type="text" value="42"/>	<input type="text" value="28"/>	<input type="text" value="32"/>		<input type="text" value="33 (est)"/>	<input type="text" value="33 (est)"/>

3. a. For Instructional Faculty: WSCH per FTEF for the past six semesters (use data from link above):

Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016
<input type="text" value="492"/>	<input type="text" value="494"/>	<input type="text" value="475"/>	<input type="text" value="475"/>	<input type="text" value="461"/>	<input type="text" value="463"/>

Full-Time Faculty Request Form 2016-17: FHPC Revisions May 3, 2012, Sept. 18, 2012, April 30, 2013, December 4, 2015; Presented to Academic Senate-January 27, 2016



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b. For non-instructional faculty (librarians and counselors): Student/Faculty ratio for the past six semesters, and projected for one year assuming a successful hire. Divide headcount by number of full-time faculty. For example: 8000 students divided by 3 full-time faculty. 1:2666

(If requesting more than one position, see Rajinder Samra to determine the projected numbers).

Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015		<u>Projected</u> Fall 2017	Spring 2018

4. Program Characteristics:

- a. List the courses taught and/or work performed in the discipline.
(Be brief and specific. Use your Program Review to complete this section.)

Courses taught in discipline: Anatomy, Botany, Cell Biology, Ecology, Human Biology, Introductory Biology, Marine Biology, Microbiology, Human Physiology, and Zoology.

Biology is the largest science department. We serve pathways for transfer, CTE, and Allied Health as well as General Education. Faculty must stay current in a rapidly changing discipline, and have expertise in laboratory pedagogy that is safe, engaging, and meets Student Learning Outcomes and industry standards.

- b. Total number of primary sections as identified in data taught in the discipline in each of the last six semesters (use data from link above):

Fall 2013	Spring 2014	Fall 2015	Spring 2015	Fall 2014	Spring 2016
29	39	34	39	39	39

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c. Student enrollments in the classes taught or number of students served in each of the last six semesters (use data from link above):

Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016
162	186	171	188	189	199

d. List special characteristics of the discipline such as: (Be brief and specific. Use your Program Review to complete this section.)

- Mandated class size limits due to state, contract, and accreditation standards.
- Facilities
- Number of courses out of the total number of courses in the discipline that meet General Education Requirements
- Number of courses out of the total number of courses offered that are required as part of an AA/AS degree, certificate or transfer
- Discipline provides basic skills courses
- Discipline provides mandated and specialized services to students
- Other

Mandated class size: Courses with labs are typically limited to 24 students, reflecting the number of lab stations available and ensuring safety and adequate and efficient student access to reagents, equipment, etc.

Facilities: Biology labs require specialized wet lab facilities, equipment, instrumentation, and safety protocols to deal with biological and chemical hazards. Faculty must be qualified to safely handle potentially dangerous materials and to ensure the safety of students working with these materials.

Courses that meet General Education requirements: 100% of our 12 courses satisfy AA/AS GE requirements and CSU and UC transfer requirements.

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5. Describe how courses and/or services in this discipline impact other disciplines and programs. (Be brief and specific. Use your Program Review to complete this section.)

Students taking Biology classes directly increase enrollments in related fields (e.g., Chemistry, Physics, Math). Continued growth of both the Biology majors and Allied Health pathways has resulted in several new sections of Chemistry and higher enrollment in Physics. High demand exists for Bio 30 (entry class into various degrees and pathways), but we had not added a new section for many years until Summer 15.

As outlined in our 2015 Program Review: Biology courses are required in 6 AA degrees (e.g., Environmental Studies, Physical Education, Psych, Biology, Biology- Allied Health, Liberal Arts and Sciences), 5 AS degrees (Occupational Safety, Viticulture, Enology, EMS-EMT), 5 Certificates of Achievement, and other Career Certificates (Sports Medicine) and preparation for transfer for CSU and UC programs (Viticulture, Enology, Chemistry, and Environmental Studies).

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6. If this is the first full-time position in the discipline, discuss: (Be brief and specific. Use your Program Review to complete this section.)

- b. Justification for the position.
- c. Projected start-up costs for equipment, facilities, and support staff for the first three years.
- d. Projected enrollment growth for the next three years, starting with the first semester of the projected faculty hire.

7. What are the impacts on students, the discipline and the college of NOT filling this faculty position? What are the programs/courses/services that have not been or cannot be offered due to the vacancy? (Be brief and specific. Use your Program Review to complete this section.)

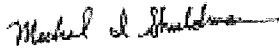
Please see attached file

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8. Any additional information that addresses justification of the position. If multiple positions are being requested, this is an opportunity to differentiate the justifications for additional positions.

Please see attached file

Signatures:



Requestor



Dean



Vice President

Question 7. The Biology major's program is outstanding, on par with an elite liberal arts college. Biology is the largest science department on campus and has a high transfer rate to 4-year universities. Our students present independent research at scientific conferences, obtain competitive internships (e.g. at Sandia National Lab), and participate in partnerships with the community. Many of our partnerships require a lead faculty member with expertise in cellular and molecular biology. We have already committed to and obtained funding for programs and activities that require oversight and expertise in cellular and molecular biology (e.g. developing Computational Biology Certificate, Biotech Boot Camp). Molecular and cellular biology are not the areas of expertise of our only full-time Biology Majors faculty member. Currently we have no full-time faculty members with the specific expertise to teach General Zoology (Bio 1B) or Cellular and Molecular Biology (Bio 1C). These classes make up 2 out of 3 of our Biology Majors classes. It will be impossible to maintain the level of quality we currently provide our students without another full-time Major's Biology faculty member to sustain and develop the program. The additional full-time faculty member we are requesting would teach both General Zoology (Bio 1B) and Cellular and Molecular Biology (Bio 1C).

Our Allied Health program has 3 full-time faculty members. Our Biology Majors program, which is nearly the same size, has only 1 full-time faculty member. Faculty non-teaching assignments (e.g. reassign time) or leaves (e.g. sabbaticals and work load banking) periodically occur and would create a situation with no full-time faculty lead in the Biology majors program. For example, this spring, the only full-time Biology majors faculty member will be on maternity leave for the majority of the semester; therefore, none of our Biology majors classes will be taught by full-time faculty.

Specific Impacts to students

Cloning/Sequencing/Bioinformatics Project: Previously the majors program had a capstone project to clone and sequence a gene. This project provided students with skills that are extremely marketable to industry and academic labs. Our students were specifically recruited for these prestigious positions because of the experience gained from this project. This is a huge loss. This 10-week experiment was not offered this semester because an adjunct faculty member is teaching the class. The level of time-commitment and coordination is unrealistic to expect of an adjunct. To ensure the success of the experiment the former full-time Biology majors faculty member developed a supplementary program to mentor former students to become a team of teaching assistants. The teaching assistants worked with the faculty member on teaching pedagogy, as well as the skills and techniques required to complete the experiment successfully, and supported the current students as they carried out the experiment for the first time.

Student Independent Laboratory Research: Full-time Biology majors faculty members typically supervise multiple honor's projects and independent study projects each semester (2-7 students). This level of advising will be lost for General Zoology (Bio

1B) and Molecular and Cellular Biology (Bio 1C). Only full-time faculty members typically have sufficient time to supervise the extensive lab work for these projects outside of normal class time. These projects are a critical step to student success in transferring to 4-year schools, obtaining jobs in industry and academia, and succeeding in applications to graduate school and medical school.

Advising: Historically the majority of the members of the Beta Beta Beta Biological Honor Society and the Biology Club were students majoring in Biology. In the past the club was co-advised by a faculty member from the Allied Health major and a faculty member from the Biology major. Due to strong faculty support, these organizations have high student participation and help students build a supportive network that helps them succeed. The clubs provide tutoring, seminars and other educational programs. We need strong faculty presence to draw members in and the faculty member we are requesting would teach 2 of the 3 biology majors classes (General Zoology and Cellular and Molecular Biology). A full-time faculty member is more able to act as a student advocate and provide more informal advising than an adjunct faculty member (e.g., where to apply for transfer, internships, jobs). A faculty member who knows a student's strengths inside *and* outside of class can provide a greater level of advising and support. It will be impossible to maintain this level of advising without another full-time faculty member.

Career Goals: Our full-time Biology majors faculty members typically write many recommendation letters per semester. Long-term relationships between students and faculty are more likely with a full-time faculty member. Many of these recommendations are for students who have already transferred and need letters for graduate school, medical school, dental school, etc. These letters are critical to students achieving their goals.

Impacts to discipline

Biotech Boot Camp: We have a grant and commitment to establishing an innovative program, in conjunction with the Livermore School District, to bring high school students to campus for a pilot program starting summer 2017 to learn biotech skills. To institutionalize this program will require leadership from a faculty member with cellular and molecular biology and biotechnology skills.

Bioscience Advisory Board: The main areas of growth for jobs in biology are in areas of biotechnology, molecular biology, and bioinformatics. Our partnership with the Bioscience Advisory Board is the primary way we interface with local industry to develop programs that they need. This partnership requires a full-time faculty person with cellular and molecular biology expertise to lead industry-advised initiatives. With feedback from this group, we committed to develop a Computational Biology Certificate to meet industry needs. The members of this board are familiar with our students and we currently have a reputation of exceeding the norm in student skills related to safety, professionalism, work ethic, and experimental procedures.

Community Partnerships: Our previous faculty member had established partnerships with the National Food Lab, LLNL, and Sandia labs. For example, students from Molecular and Cellular biology (Bio 1C) are specifically recruited and earn prestigious internships and jobs with these partners. A partnership with the Joint Genome Institute involves a faculty member with expertise in molecular biology attending the annual users meeting and bringing a select subset of students from Molecular and Cellular Biology to attend. Continued partnership and innovations with academia, non-profits, government labs, and industry requires the lead of a full-time faculty with this expertise.

Funding: The Biology majors program successfully writes grants to innovate programs. Many of the opportunities are in areas such as bioinformatics, biotechnology, and synthetic biology. We need a full-time faculty member with expertise in cellular and molecular biology to pursue opportunities in these areas.

Impacts to college

Science Research Poster Session: Typically there are more than 70 posters, 150 students, and 8-10 faculty from across multiple disciplines that submit posters and abstracts for this event. In the past about 30% of the posters were individual research projects from the General Zoology (Bio 1B) course. The amount of coordination for the logistics and funding of this event is more than we could expect from an adjunct faculty member teaching General Zoology.

Lawrence Livermore National Lab Seminar Series: The former full-time Biology majors faculty member co-coordinated this event. Biology students attend in great numbers and it is important to have a biology perspective when putting the schedule together so that biological topics are included. These seminars are an invaluable resource to our students interested in scientific research.

Question 8.

In addition to all of the impacts to the students, discipline and college the future plans of the Biology majors program require the expertise of a full-time faculty member with cellular and molecular biology skills.

Computational Biology Certificate: We have committed to developing this certificate as recommended by the Bioscience Advisory Board and supported by the Strong Workforce Program. It requires a faculty member with specialization in molecular and cellular biology to work with industry. We will be one of the very few institutions to offer a certificate at this level.

Science Building – Measure A: –When developing new science facilities, we will require faculty with expertise in state-of-the-art molecular, computational, and synthetic biology. This may include areas such as genomics, nanotechnology, proteomics, metabolomics, etc. We do not currently have a full-time faculty member who can adequately advise in these areas.