

## FACULTY NEEDS ASSESSMENT APPLICATION

Name of Person Submitting Request:		<b>David Bastedo</b>
Program or Service Area:		<b>Biology Department</b>
Division:		<b>Science</b>
When was the last Program Efficacy document completed?		<b>Spring 2009</b>
What rating was given?		<b>Expansion</b>
# of FT faculty = 6	# of Adjuncts = 26	Faculty Load = 17.89
Position Requested		Biology Instructor – Anatomy/Physiology

1. Provide a rationale for your request.

In 2007 – 2008, the Biology department was granted a faculty position. This resulted in the hiring of a new faculty in the Biology Department for the 2008-09 year. This position was the result of a well-written PR needs assessment (2007) that recognized the extreme need of the Biology Dept due to growth in students served. In the recent round of retirement incentives, 3 faculty members of the department retired and only two are currently being rehired. That leaves the department in the same difficult position it was in 2007. The data in growth, efficiency, total students served, and challenging subject matter, all argue for the reestablishment of the Biology faculty member lost during retirement incentives. The Biology department is one of the departments in the college that has maintained its student load even in these challenging times. The department never closes classes. The classes that are offered always fill completely. The demand for classes has been so great especially in the health care fields and the efficiency of the instruction so high, that the department has one of the highest productivity rates in the college. The data in part two will bear out the arguments made here. [Unsure if you have access to the 2007 needs assessment for Biology, I have attached page 3 from that document that explains the original need.]

2. Indicate how the content of the EMP One-Sheet and latest Program Efficacy Report support this request. How is the request tied to program planning? (*reference the page number(s) where the information can be found on the EMP and Program Efficacy*).

At present, the full-time to part-time faculty ratio is very low. This figure strongly affects student success and retention. The most recent department FTEF (EMP page 28, yr 2008-09) was 17.96 per semester (35.91/2). The Spring 2010 EIS data gives 17.89. This figure is typical for the department in recent years. At present there are only 6 full-time faculty members, a 33% ratio. After two faculty members are hired this semester, the full-time to part-time load will be 44.5%. Much less than half of the students in the department are being instructed by full-time faculty currently and will be even after the current hires. Even the addition of the one requested faculty member will only bring the ratio to 50.3%. The department has seen explosive growth (mostly in health care courses) in the last ten years. As recent as 2004-5, the semester FTEF was only 15.18 (one page EMP). We have added almost 3 FTEF in the 5 years shown on the EMP.

Though the present full-time ratio is very low, the efficiency of the department is very high, the highest in the division and nearly in the college. The latest data show a 599 WSCH/FTEF. The department average is almost 600 for the last 6 years. The college average (page 17 EMP)

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is well below 500, peaking last year at only 517. This information is also attested to in the Spring 2009 Biology Efficacy document, page 13 and 15. Of course this efficacy can have a negative effect on student success. Higher WSCH/FTEF means that instructors are serving more and more students. This challenge coupled with the technical subject matter creates difficulties that full-time faculty are more prepared to handle. The department also struggles with the lack of prerequisites. Eighty percent (80%) of courses in the department have no prerequisites. For challenging subject matter this is especially difficult. The department is committed to raising its retention and success rates (EMP pg 28, Challenges and opportunities). "At the core of SBVC's mission and vision is the commitment to student success." (EMP pg 105) As good as our part-time faculty members are, full-time faculty will always excel in meeting these challenges. A subtle burden created by low full-time faculty support is that there is an ever-increasing burden on the full-time faculty members who assist in recruitment, screening, training, mentoring, and the evaluation processes for part-time faculty. All these facts successfully argue for another full-time member of the Biology department.

3. Provide updated or additional information you wish the committee to consider (for example: regulatory information, compliance, updated efficiency and/or student success data or planning etc).

The problem of lack of prerequisites is partly due to requirements for pre-nursing courses. It is mandated that prerequisites for nursing programs must only take 2 semesters. Some courses are prerequisite for a second semester, like A&P I and A&P II, so the initial course cannot have a prerequisite. Since 70% of our courses are allied health preparation courses, most have no prerequisites. Typically 50% or more of our students are unprepared for success. The department has recently created a "Preparation for A&P" course as a possible help to students (EMP pg 28, Program Goals). It can't be required though. The department needs more full-time faculty to help prepare students to be successful in these challenging classes.

4. Evaluation of related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (for example: Department Budget, VTEA or Perkins).

There are no related costs. The only source of funding for a full-time faculty member is from the general college budget.

5. What are the consequences of not filling this position?

As indicated above, the department will continue to function with only 44.5% of its courses being instructed by full-time faculty members if this position is not reinstated. This will degrade the overall quality of instruction and service that can be provided to almost 4000 students per year (EIS data Sp2010). This level of student service has been sustained for years and meets the needs of our student body. One of the major elements in student success is the quality of its faculty. Part-time instructors as good as they are have divided loyalties and foci. In a discipline with few prerequisites and difficult subject matter, it is important for the college to recognize the extreme need of the Biology Department to rehire its missing faculty member.

## Faculty Staffing

Please provide a thorough rationale for your faculty position request(s). Be sure to provide substantive, compelling data that demonstrates growth, efficiency, and productivity to help the committee evaluate your request and compare it with others. Please provide for the committee:

1. A thorough description of your current staffing pattern, including:
  - a. Number of full-time faculty
  - b. Number of adjunct faculty
  - c. Vacancies, if any
  - d. Amount of load generated, if applicable

The Biology Department requests two new full-time faculty members.

When program review was initiated in 1992, the Biology Department was staffed by 8 full time faculty members teaching 41 sections per semester. In the last several years, with a rise in interest in health-care careers, growth in Biology has increased. In the Fall of 2007 we will be offering 62 sections (FTEF = 17). There are currently 17 adjunct faculty members. Once full-time faculty taught a large proportion of its sections, now they teach approximately 47% of all departmental sections. In a subject area as challenging as biological science, qualified full-time instructors should be instructing the majority of its courses.

Most classes offered by this department have a lecture/lab ratio of 1:2, i.e., 56 students in the lecture and 28 students in each of the 2 labs linked to the lecture. This scheduling makes the Biology Dept one of the most productive in the college in terms of WSCH/ FTEF ( 6 yr. average.=596, campus average.=458). If the Biology Dept were to switch to a 1:1 ratio for pedagogical reasons (as some other science departments at SBVC have), its FTEF would nearly double. Continuing inequities in District policy of calculating load regardless of class size and in lecture vs lab further distort the FTEF. Each faculty member gets .200 load for teaching a lecture, whether it has 28 or 56 students. Each faculty member gets only .143 load for each comparable 3 hours of laboratory instruction, yet the workload for the faculty member is often as much or more for lab as for lecture. Labs always result in greater student contact and always include lecture content.

No load classes such as Independent Study and Directed Study further add to faculty burden. The Biology Department overall FTEF of 16.79 for 2006-2007 would have been near 32, recalculated using a 1:1 ratio and assigning load for no load classes. As evidenced here, the Biology Dept is in dire need of additional full-time faculty. To match our staffing levels of 1992, the

Biology Dept would have to add 3 or 4 full-time faculty members, but we are requesting only 2 at this time.

Because the majority of growth has been in the area of Anatomy and Physiology, our first priority is a new faculty member in this area. The second priority is to support growth in Microbiology and development of the new Biotechnology program with a faculty member educated in this specialty. The addition of a single faculty member would still bring the full-time load to only slightly over half. Two full-time instructors are needed to raise the quality of instruction and reduce our dependence on short-term adjunct faculty.

2. A thorough rationale and an assessment of the consequences/repercussions if the position is not approved. Be sure to describe how your program will provide services or instruction if the position is not filled.

If new full-time faculty members are not funded, the Biology Dept will find it very difficult to sustain its current rate of growth while maintaining a quality program. This department provides a means of proven growth for the college in need of increased FTES. But, the overall efficiency of the department will be negatively impacted by a continued lack of full-time faculty. The department can continue without more full-time faculty, but the result will be an increasing number of adjunct faculty to carry the load of an increasing number of sections. It is likely that retention will decrease as less experienced instructors carry more and more of the load.

A subtle burden created by low full-time faculty support is that there is an ever-increasing burden on the full-time faculty members who assist in recruitment, screening, training, mentoring, and the evaluation processes. Also, every year many of our best adjunct faculty members find full-time positions elsewhere, as employment opportunities in the sciences are numerous. This means that the strain on the department is not just ponderous but continual. The turnover rate from year to year is often 30%. If adjuncts teach 53% of the department's sections and 30% of those adjuncts are new each year, then a significant proportion of our students are receiving instruction by first year instructors. This has an enormous impact when you consider the total number of sections that this department is responsible for. Anyone can see that the quality of instruction suffers in this situation. Students will still get taught, but the quality of that instruction suffers.

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