FACULTY NEEDS ASSESSMENT APPLICATION

Name of Person Submitting Request:		Todd Heibel		
Program or Service Area:		Geology-Oceanography and GIS		
Division:		Science – Ranked Third		
Date of Last Program Efficacy:		Spring 2012 for GEOL-OCEAN and Fall		
		2011 for GIS		
What rating was given?		Continuation for both programs		
# of FT faculty: 0	# of Adjuncts: 2-3	Faculty Load: 0.54-1.28 from GEOL-		
	in GEOL-OCEAN	OCEAN and 1.18-1.27 from GIS (during		
	and 3 in GIS	the past five semesters)		
Position Requested:		1 (one) full-time faculty member for both		
_		programs (Geol-Ocean and GIS)		
Strategic Initiatives Addressed:		Access, Campus Climate and Culture,		
		Institutional Effectiveness, Partnerships,		
		and Student Success		

1. Provide a rationale for your request.

Neither program, GEOL-OCEAN nor GIS, has a full-time faculty member. During the past six years, these programs have relied exclusively upon adjunct instructors. These combined programs create a teaching load of 1.72 to 2.55 and present numerous challenges and opportunities for a full-time faculty member. Although these programs are functional and provide students with valuable learning and skill-development opportunities, they are unable to meaningfully expand and develop beyond their current state. Specifically, this faculty is needed to solicit grant funding (including Perkins funding); engage in outreach with area high schools, community colleges, four-year institutions, museums, and potential employers; recruit and facilitate successful transfer and entry-level employment; and maintain and update curriculum and SLOs (and regular SLO evaluations). In addition, advertising for a full-time Geologist-Oceanographer (or related Earth Scientist) with solid GIS skills would likely yield a significantly larger candidate pool, in contrast to a part-time (adjunct) position. Indeed, this particular combination of education and skills is especially difficult to locate within academia. However, an advertised full-time position would likely attract a candidate with the requisite qualifications.

2. Indicate how the content of the latest Program Efficacy Report and/or most current EIS data support this request. How is the request tied to program planning? (Reference the page number(s) where the information can be found on Program Efficacy.)

Please reference the following data from 06-07 through 11-12 academic years for GEOL-OCEAN:

Year:	FTES:	Census:	FTEF:	Efficiency:	Success:	Retention:
06-07	26.5	200	2.16	368	71%	87%
07-08	27.17	219	2.66	306	65%	79%
08-09	34.5	304	2.96	360	62%	79%
09-10	42.6	306	2.16	592	71%	85%
10-11	48.5	485	2.36	617	75%	86%
11-12	25.69	251	1.28	626	84%	90%

Please reference the following data from 06-07 through 11-12 academic years for GIS:

Year:	FTES:	Census:	FTEF:	Efficiency:	Success:	Retention:
06-07	1.50	15	0.2	225	60%	67%
07-08	5.92	72	1.32	135	72%	79%
08-09	9.15	89	1.69	162	76%	85%
09-10	19.70	186	1.69	350	78%	91%
10-11	31.74	239	2.45	389	77%	88%
11-12	22.52	173	2.45	276	59%	74%

According to the latest GEOL-OCEAN Efficacy Report (p. 31): The greatest barrier to the growth and overall stability of the Geology-Oceanography is the lack of a full-time, tenure-track faculty member. This Department presently relies upon two to three adjunct faculty members. The Geology-Oceanography Department has been made aware that it must increase FTES and faculty load such that it warrants a strong position (ranking) within the Program Review faculty Needs Assessment. However, increasing FTES and faculty load remains extremely difficult without a full-time, tenure-track content expert. This Department is concerned that, lacking a full-time faculty member, it will: not grow beyond its present configuration; not be able to offer students an AS degree; not fully encourage women, students of color, and other underrepresented populations to enter into the Earth Sciences; and not positively contribute to FTES growth within the Science Division, College, and District.

According to the latest GEOG-GIS Efficacy Report (p. 27): With one exception, there are no full-time instructors within the GIS program. Although the current GIS instructors are professional and capable (and drawn from within the GIS industry), it is difficult to guarantee the permanence of adjunct instructors. However, with the introduction of a full-time GEOL-OCEAN-GIS faculty, the stability of the GIS program should be better maintained.

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

In order to increase the FTES, census, FTEF, efficiency, success, and retention for these programs and students, a dedicated, full-time content expert must be hired. In addition, the latest Environmental Scan reports (SBCCD Centers of Excellence, 2012) suggest continued growth within the fields of environmental sciences, hydrology, energy procurement and processing, and GIS. Therefore, this faculty has the potential to positively influence individual students' lives, as well as the broader community economy (Efficacy, *Part IV. Planning* and *Part V. Technology*, *Partnerships & Campus Climate*, pp. 28-34).

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

Without an additional faculty, the department cannot meet the Strategic Initiatives previously noted, nor can it continue to offer entry- and advanced-level courses and internships, advise incoming and outgoing students, and meet the changing needs of transfer- and career-minded students and the Earth and environmental science, and GIS industries.