

Developing Hispanic Serving Institutions (HSI's) Programs provides grants to expand educational opportunities for, and improve the attainment of, Hispanic students. These grants also enable HSIs to expand and enhance their academic offerings, program quality, and institutional stability.

2016 STEM Grant Proposal

HSI-STEM Grants at Crafton Hills College

- STEM Pathways Grant (2011 – 2016) – YES!
- STEM Success Grant (2016-2021) – MAYBE?

"A student success grant with a STEM focus."

"Tell our story."

Outline

- Need (Problems)
- Project Design (Objectives)
- Project Services
- Key Personnel
- Adequacy of Resources
- Management Plan
- Project Evaluation
- Budget

Problems – Student Populations

- Population of Hispanic Students
 - Increased percentage of Hispanic students
 - Characteristics and circumstances of Hispanic learners
 - Decreased overall enrollment due to upturn in economy
- Number of STEM Directed Students
 - Has increased due to current HSI-STEM Grant
 - Associate Degrees and Transfer
 - Number of Hispanics pursuing STEM
 - Not closing the achievement gap
 - Industry's needs for highly qualified STEM professionals is still not being met

Problems – Academic Success

- Quantitative Indicators
 - Course Completion
 - Course Success
 - Fall to Fall Retention
 - Persistence within a sequence (ANAT 150-151, BIOL 130-131, CHEM 150-151, CHEM 212-213, MATH 250-251-252, PHYSIC 110-111, PHYSIC 250-251, 252)
 - Persistence from beginning of STEM Pathway (CHEM 150) to end
- Lack of comprehensive academic support
 - Tutoring
 - Supplemental Instruction
 - Early Alert
 - Intrusive Interventions

Problems – Educational Planning and Transfer

- Success of the dedicated counseling model
- Legislative efforts to streamline process for transfer within the state of California.
 - AS-T degrees
 - C-ID
- Differing requirements of institutions or even differing departments within the same institution
 - General Education requirements
 - Lower Division Major Preparation
- Need for articulation support still exists

Problems – Outreach and Support for Special Populations

- Outreach
 - High school outreach is too late to affect change
 - Middle school outreach to introduce STEM
 - Community outreach to reach parents and others
 - Generally low college-going rates in San Bernardino County
- Adult Re-entry Students
 - Low numbers in general
 - Do not see STEM as a viable option
 - No systematic support for adult re-entry students
- Disabled Students

Problems - Other

- Basic skills math students and STEM
 - Most STEM directed students assess in MATH 095 or higher
 - Students who assess lower do not see STEM as a viable option
- Equipment
- Professional Development

Goals

1. Increase STEM associate degrees among Hispanics
2. Increase transfer preparedness in STEM fields among Hispanics
3. Increase course completion, success, retention and persistence.
4. Sustain STEM Academy and STEM Trek and provide comprehensive academic support to all STEM students
5. Contacts through outreach
6. Increase in number of and support for adult re-entry and disabled students
7. Increase number of students who begin in MATH 942, 952 090 who complete the STEM Pathway
8. Equipment
9. Professional Development

Strategies – STEM Success Center

STEM Success Center

- Math-Science Cluster Concept
- Decentralized Two-Center Model (Chaffey)
- SI, Tutoring and other Support
- Online Tutoring
- DLA's
- STEM Library
- STEM Academy and STEMTrek
- Starfish (Early Alert)
- Peer Mentoring
- Dedicated Counseling
- Professional Development

Strategies – Undergraduate Research

Undergraduate Research

- Mount San Antonio Model – Partnership with four-year institutions to place our students with researchers there.
- Copper Mountain Model – Partnership with community organizations and governments agencies to promote research support (e.g. U.S. Forest Service)
- Summer Laboratory Assistants

Strategies - Outreach

- Outreach
 - Middle school STEM outreach
 - Community outreach
 - Replicate Promise Scholars in Yucaipa
 - Summer course opportunities
 - Concurrent and dual enrollment
- Adult Re-Entry Cohort Program
 - Outcomes based
 - Marketed to Spanish language learners
 - Complete personal and career assessment
 - Team of faculty
 - One or two major options
 - Do not “see” a course
 - Weekend and evening courses, online later
 - High touch, peer mentor

Key Personnel

- Project Director
- Project Analyst
- Secretary I – STEM Success Center
- Success Center Coordinator
- Outreach Coordinator
- Undergraduate Research Coordinator

Other Personnel

- Counseling
- Transfer Center Support
- Articulation Support
- Librarian – STEM Library
- SI Leaders and Tutors
- Laboratory Assistants
- Instructional Designer
- Faculty Stipends or Reassigned Time

Budget

	% of Time	Funds Requested	% of Time	Funds Requested	% of Time	Funds Requested	% of Time	Funds Requested	% of Time	Funds Requested
a. Personnel (Position Title)										
Project Director (15)	100	89,296.00	100	93,762.00	100	93,762.00	100	93,762.00	100	93,762.00
Benefits (1000's) -35%		31,254.00		32,817.00		32,817.00		32,817.00		32,817.00
Project Analyst (44)	100	50,436.00	100	52,956.00	100	55,596.00	100	58,380.00	100	61,296.00
Benefits (2000's) -35%		17,652.60		18,534.60		19,458.60		20,437.00		21,454.00
Secretary I (29)	100	34,848.00	100	36,588.00	100	38,412.00	100	40,332.00	100	42,360.00
Benefits (2000's) -35%		12,197.00		12,806.00		13,444.00		14,116.00		14,826.00
Success Center Coordinator (E6)	100	63,912.00	100	63,912.00	75	47,934.00	50	31,956.00	25	15,978.00
Benefits (1000's) -35%		22,369.00		22,369.00		16,777.00		11,185.00		4,192.00
Outreach Coordinator (E12)	100	75,971.00	100	75,971.00	75	56,978.00	50	37,986.00	25	18,993.00
Benefits (1000's) -35%		26,590.00		26,590.00		19,942.00		13,295.00		6,648.00
UG Research Coordinator (J8)I8?		-	100	78,443.00	75	58,832.00	50	39,222.00	25	19,611.00
Benefits (1000's) -35%		-		27,455.00		20,591.00		13,727.70		6,864.00
Other										
Counseling Hours (19hr @ 36wks)		33,516.00		33,516.00		33,516.00		33,516.00		33,516.00
Transfer Center Counselor		33,516.00		33,516.00		33,516.00		33,516.00		33,516.00
Librarian 10hr@36wks		-		17,640.00		17,640.00		17,640.00		17,640.00
Benefits (1300-1400's) -11%		3,690.00		9,313.92		9,313.92		9,313.92		9,313.92
Release Time -Pilot Courses		3,060.00		3,060.00		6,120.00		6,120.00		6,120.00
Benefits (1000's) -35%		1,071.00		1,071.00		2,142.00		2,142.00		2,142.00
SI Leaders/Project Asst (2401, 2381)		36,000.00		36,000.00		36,000.00		36,000.00		36,000.00
Benefits (2000's) - 3%		1,080.00		1,080.00		1,080.00		1,080.00		1,080.00
Travel		15,000.00		15,000.00		15,000.00		15,000.00		15,000.00
Equipment -30% of Total		261,000.00		261,000.00		261,000.00		261,000.00		261,000.00
Supplies -		-		-		-		-		-
Contractual										
Instructional Designer		-		10,000.00		10,000.00		10,000.00		10,000.00
Dowden	rojecPro	30,000.00		30,000.00		30,000.00		30,000.00		30,000.00
External Evaluator		10,000.00		10,000.00		10,000.00		10,000.00		10,000.00
Speakers		-		10,000.00		10,000.00		10,000.00		10,000.00
Stipends		15,000.00		15,000.00		15,000.00		15,000.00		15,000.00
Construction										
Total Direct Charges		867,458.60		1,028,400.52		964,871.52		897,543.62		829,128.92