# **Mathematics Engineering Science Achievement Instruction**

#### Vision/Narrative

The grant that funds Gavilan College's MESA Program was recently renewed for another three years. MESA has been the oldest and longest running STEM grant at Gavilan College and will be continuing into its 19th year at Gavilan College. The program provides science, technology, engineering, and math (STEM) academic development to educationally disadvantaged community college students so they will excel academically and transfer to a four-year university. For example.

- A. MESA serves an average of 29% of all the Low-income STEM Majors on campus.
- B. MESA serves an average of 35% of all the Female STEM Majors on campus

Several highlighted programming areas include the following,

- New and continuing business/industry relationships such as Western Digital, NASA, Lockheed Space Industries, Cisco Systems, and more
- Continued milestone events to honor students progress and family engagement workshops
- New semester-long book loans for expensive STEM Books including physics, calculus, chemistry, and biology
- Partnership with a local community organization to develop a new after-school STEM Program
- Continued partnership with Gavilan College's STEM Grant resulting in key outcomes such as providing a full-time MESA/STEM Counselor

## Feedback from Supervisor / Dean

This plan nicely demonstrates engagement with integrated activities, measurable outcomes, and practical action steps. The plan would benefit from more explicitly connecting the proposed activities to SLO results. What are the short and long term goals for the program? what cross-functional activities are being undertaken with other support services, initiatives, and grants currently underway at the college? Objective 1 begins this work. Objective two is specific and measurable, but is it warranted? In other words, what should our ideal goal for MESA be, and how does this short term goal get us to the ideal?

Program Objective #2281
Mathematics Engineering Science Achievement
Instruction

**Program Objective 1:** Develop existing and new strategies to collaborative with the STEM III Grant to promote STEM major course success and transfer rates.

#### **Strategy and Goal(s):**

Strategy #2: Improve student services and enhance curriculum and programs in order to help students meet their educational, career, and personal goals.

Goal #1: Increase the student success, completion, and transfer rates using reasonable benchmarks specified by the College.

#### **IEC Program Review:**

No: New STEM Grant and long time MESA program

#### **Progress:**

Yes: We jointly hired a MESA/STEM Counselor

Activity 1: Enhance the role of the new full time MESA/STEM Counselor in college wide STEM efforts

Personnel Request - *none* Non-Personnel Request - *none* 

Activity 2: Develop a plan to ensure a comprehensive approach where the integrity of the spirit of MESA Program and MESA Service Program is maintained in providing above and beyond services to qualified students while working in conjunction with the STEM grant.

Personnel Request - *none* Non-Personnel Request - *none* 

Activity 3: Collaborate on the development of guided STEM pathways to include meeting the objectives of the MESA and the STEM Grants.

Personnel Request - *none* Non-Personnel Request - *none* 

**Activity 4: Explore and implement other collaborative activities** 

Personnel Request - *none* Non-Personnel Request - *none* 

#### **Rankings:**

Ranker	Comments	Rank
Dean		
Vice-President	It's a good idea to collaborate with the new STEM grant to ensure that MESA students are incorporated in the cohort and the STEM counselor is working with them.	12
Budget Committee		
President's Council		

Program Objective #2282
Mathematics Engineering Science Achievement
Instruction

#### **Program Objective 2:** Increase the MESA course success rate by 1.5%

#### **Strategy and Goal(s):**

Strategy #2: Improve student services and enhance curriculum and programs in order to help students meet their educational, career, and personal goals.

Goal #1: Increase the student success, completion, and transfer rates using reasonable benchmarks specified by the College.

#### **IEC Program Review:**

No: Objective is based on the MESA Grant and meeting Transfer goals in the long-term

#### **Progress:**

Yes: Tutorial support services

Activity 1: Provide tutoring services that are dedicated only to MESA Students given funding restrictions

Personnel Request - *none* Non-Personnel Request - *none* 

Activity 2: Continue to provide a dedicated MESA Study center as required by the MESA Grant and a safe space for underrepresented students as highlighted by research presented at the University of Utah and University of San Francisco

Personnel Request - *none* Non-Personnel Request - *none* 

Activity 3: Provide socially and cultural relevant intervention services that include asset based approaches

Personnel Request - *none* Non-Personnel Request - *none* 

Activity 4: Ensure that tutoring services also include non-STEM courses that are essential for transfer such as writing tutors

Personnel Request - *none* Non-Personnel Request - *none* 

#### **Rankings:**

Ranker	Comments	Rank

Dean		
Vice-President	Good overall strategies to improve student outcomes, integrate with existing and emerging services and Instructional programs, etc.	11
Budget Committee		
President's Council		·

Program Objective #2283
Mathematics Engineering Science Achievement
Instruction

**Program Objective 3:** Develop external relationships with business/industry, education, and community organizations that can contribute to the MESA program and MESA student's success.

#### **Strategy and Goal(s):**

Strategy #2: Improve student services and enhance curriculum and programs in order to help students meet their educational, career, and personal goals.

Goal #1: Increase the student success, completion, and transfer rates using reasonable benchmarks specified by the College.

Strategy #6: Foster a campus culture of engagement and excellence through improved communication, coordination, collaboration, and participation.

Goal #5: Broaden contacts and communication with local high schools, businesses, and agencies so such contact, collaboration, and feedback is widespread and frequent in all sectors of campus.

#### **IEC Program Review:**

No: Based on MESA Grant

#### **Progress:**

Yes: We have some partnerships that are currently underway.

Activity 1: Develop new partnerships with local organizations such as but not limited to Rotary and LULAC

Personnel Request - *none* Non-Personnel Request - *none* 

Activity 2: Continue to develop the partnership with the LEAP after school program to promote STEM in San Benito County

Personnel Request - *none* Non-Personnel Request - *none* 

**Activity 3: Continue to apply for funding from Lockheed Space Industry** 

Personnel Request - *none* Non-Personnel Request - *none* 

Activity 4: Seek out new business and Industry Partners for MESA

Personnel Request - none

# Non-Personnel Request - none

### **Rankings:**

Ranker	Comments	Rank
Dean		
Vice-President		9
Budget Committee		
President's Council		