



Hartnell College - Office of Institutional Advancement

Grant Concept Form

November 2020

1. New/Renewal Grant Project - What do you want to do?

Title: IDEAS in STEM with Transformational Nano and Micro Stepping Stones

Website: <https://beta.nsf.gov/funding/opportunities/improving-undergraduate-stem-education-hispanic-se>

Abstract: Fill in Abstract below:

This is for National Science Foundation (NSF) program on Improving Undergraduate STEM Education at HSIs. The goals are to enhance the quality of STEM education and to increase the recruitment, retention, and graduation rates of students pursuing degrees in STEM. Achieving these, given the diverse nature and context of Hartnell, requires additional strategies that support building capacity through innovative approaches. This project will leverage the success of the NSF-funded ESTEEM program (Micro-Internships) and wide partnerships for Inclusion, Diversity, Equity, Access, and Success (IDEAS) in STEM with Transformational Micro Applied Learning Experiences. Intended outcomes include broadening participation and integration into the STEM workforce.

2. Alignment with the College Strategic Plan and Feasibility

30 _____ % **Goal 1** - Increase Student Completion

[Link to Hartnell College Strategic Plan](#)

20 _____ % **Goal 2** - Increase Student Completion Efficiency

30 _____ % **Goal 3** - Increase Student Transfer to 4 Year Institute

20 _____ % **Goal 4** - Improve Student Employment Subsequent to Training or Completion

100 _____ % **Total (should equal 100)**

Please provide a list of the Hartnell values that this grant fulfills:

[Hartnell College's Values](#)

Aligned with the college vision, Mission, and values with Transformational impact on student access, learning, development, achievement, leadership, and success. This includes providing opportunities for students to reach career and/or academic goals; preparing students to contribute as leaders; embracing and celebrating Diversity, Equity, and Inclusion; developing strategic partnerships; innovating with new effective interventions that improve success.

Be prepared to provide data to support scoring below such as Labor Market Data.

* **Scoring Criteria (1-5 WEAK to STRONG)**

- | | |
|-----------------------------------------------------|---|
| 1) Staff expertise/experience in similar projects | 5 |
| 2) Compelling need in college or community | 5 |
| 3) Strong business/community/education partnerships | 4 |
| 4) Aligns with new funding formula | 5 |
| 5) Low demand on resources (space, equipment, etc.) | 5 |
| 6) Capable of sustaining project after grant ends | 4 |

Total: ⁸ _____ (Total should not exceed 30)

List Accreditation Standards (i.e.; II.A.):

[Link to Accreditation Standards](#)

IA, IB, IIA, IIB, IIC, IIIA, IIIC, IIID

**3. If the project is for broad institutional capacity building, what are the plans for institution-wide development & implementation of proposed activities?**

Board institutional Capacity: Working with the project partners to provide professional development opportunities for faculty and staff involved in the implementation of the activities, such as leading and mentoring applied learning projects, and establishing networks to support student's internship opportunities for broadening student participation, success and integration into the STEM workforce.

4. Does the project align with or overlap with current activities or events? If yes, please provide information about activities and how current directors and program staff are involved in developing this new project/grant proposal.

- a. STEM program access and success
- b. MESA programs: Math Engineering Science Achievement.
- c. STEM Guided Pathways and Meta Major, including entering the STEM path, continuing on the path, completing/transferring, and access to the workforce.
- d. Diversity, Inclusion, and Equity
- e. Professional Development for Faculty and Staff.
- f. Partnerships.



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5. Grant Type		Due Date
<input checked="" type="checkbox"/> New		09/30/2022
Continuation		09/30/2022
Funding Source		Agency/Organization
Public: State <input checked="" type="checkbox"/> Federal		National Science Foundation (NSF) Improving Undergraduate STEM Education: Hispanic-Serving Institutions (HSI Program)
Private: Foundation Corporation		
Individual		
6. Fiscal Information - Fiscal Agent		
College	Foundation	Indirect Cost Rate: 30 Grant Amount: 3000000
7. Does the proposed project require matching funds or in-kind contributions?		
<input checked="" type="checkbox"/> No	Yes	If yes, explain: N.A.
8. Intellectual Property		
<i>Will the proposed project include the development of intellectual property?</i>		
<input checked="" type="checkbox"/> No	Yes	If yes, explain: N.A.
9. Grant Timeline		
Grant Start Date: 08/01/2023	Grant Ending Date: 07/31/2028	
10. Proposal Lead		
• Proposal Lead:	Dr. Mohammed Yahdi	
• Title:	Faculty	
• College Department:	Math	
• Phone:	8317556922	
• Email:	myahdi@hartnell.edu	



11. Additional Partners

Will this project include other agencies?

No Yes

If yes, explain: BSCS Science Learning, is a non-profit organization with a mission to transform science education nationwide. BSCS is our partner in the current NSF - ESTEEM grant

12a. Human Resources - Staffing Positions to Support the Grant

What new/continuing positions will be created to meet the proposed project objectives?

Please list the proposed titles and one-sentence job description below; include cost detail and a source of funding.

N.A.

12b. Will the proposed project require HCCD to eventually absorb the cost of staffing for the project?

No Yes If yes, explain below and complete 16a and 16b:

N.A.



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13a. Facilities, Furniture and Equipment Resources to Support the Grant

Will new/remodeled space be needed? (e.g. offices, lab and activity space, etc.)?

If so, please confer with Facilities to review the underutilized space map and describe plans below.

Will furniture and equipment be needed (e.g. workstations for staff, computers, phones, chairs, etc.)?

If so, include the estimated cost and source of the funding below.

Use of existing offices, classrooms, and learning spaces, as well as existing furniture, equipment, and technologies. No additional needs.

13b. Will proposed facilities, furniture and equipment needs continue after grant?

No Yes If yes, explain below and complete 16a and 16b:

Use of existing offices, classrooms, and learning spaces, as well as existing furniture, equipment, and technologies. No additional needs.

14a. Impact on Student Affairs and its resources?

What current resources will be used to implement this grant?

What new resources will be needed?

No new resources from Student Affairs as current facilities, STEM, and MESA resources will be used. Any needed new supplies for the applied learning experiences or expenses are included in the project budget covered by the NSF. SPA stipends for faculty will be provided as needed.



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14b. Impact on Institutional Resource and Information Technology resources?

What new institutional research will be needed? (e.g. evaluation, new data sets, new reports.)

What new informational technology will be needed? (e.g. new or additional software.)

No more than the regularly provided data from the IR since the data and research work is led by the research team supported by the grant.

14c. Will proposed institutional research and IT needs continue after grant?

No Yes If yes, explain below and complete 16a and 16b:

N.A.

15. Budget Plan – over the term of the grant

	Grant	HCCD Match	Match Other
Personnel Instructional	1500000	0	0
Personnel Non-Instructional	200000	0	0
Operating	250000	0	0
Equipment	50000	0	0
Indirect	800,000	0	0
Total	3000000	0	0

Budget Notes:

The budget includes expenses to cover the services for partners and consultants, such as for professional development related to leading applied learning activities, with sensitivity to Inclusion, Diversity, and Equity, and improving student's Access, Success, and Leadership from within, as well as external evaluators and research associates. It also includes stipends (SPAs) for mentors and compensation for the leadership team's time and effort following the NSF guidelines. It also covers 20% of the time/effort of the MESA administrative assistant.



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16a. If proposed activities will continue after grant funding ends, what are the plans for sustainability?

Indicate years and activities that will be included in Program Planning and Assessment (PPA) and Resource Requests.

N.A.

16b. Budget Plan – HCCD institutional commitment – after grant term ends

Fiscal Year:			
Personnel Instructional			
Personnel Non-Instructional			
Operating			
Other			
Total			

Budget Notes:

N.A.

17. Academic Senate - New Programs, Curriculum and/or Faculty

Does the proposal include new programs, curriculum, or faculty?

No YesProposed date to present to the Academic Senate: 09/13/2022

List faculty members involved in development:

Principal Investigator (PI): Dr. Mohammed Yahdi

The following Faculty are interested in being involved in the implementation of some of the project's activities if funded. Some contributed ideas for the development, especially by serving as mentors for Micro-Internships funded by the current NSF-ESTEEM project. Other interested faculty have not been involved in the development although interested in the implementation such as leading applied learning projects: Jeffery Hughey, Brian Palmer, Mohammad Hussain, Miguel-Angel Manrique, Tito Polo, Adrea Gonzalez Karlsson, Ver Marie Myr Panggat, Melissa Hornstein, Michael McCarthy, Rosser Panggat, Alicia Edelen, Jennifer Taylor.

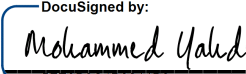
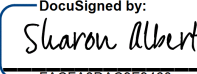
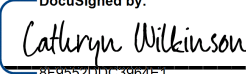


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18. The proposed project supports the goals and objectives of Hartnell College

The following signatures are the responsibility of the Proposal Lead:

Support X	Do Not Support	DocuSigned by:  <small>5FE9B8C4B0244B8...</small> Proposal Lead	09/02/2022 <hr/> Date
Support X	Do Not Support	DocuSigned by:  <small>FACFA8DAC9F9460...</small> Dean	09/08/2022 <hr/> Date
Support X	Do Not Support	DocuSigned by:  <small>8F9552DDC3964E1...</small> VP	09/13/2022 <hr/> Date

19. The proposed project supports the goals and objectives of Hartnell College

The following signatures are the responsibility of the Office of Institutional Advancement:

Support	Do Not Support	_____	_____
		Academic Senate	Date
Support	Do Not Support	_____	_____
		Vice President of Advancement and Development	Date
Support	Do Not Support	_____	_____
		Accounting Manager	Date
Support	Do Not Support	_____	_____
		Vice President of Administrative Services	Date
Support	Do Not Support	_____	_____
		Vice President of Information Technology	Date
Support	Do Not Support	_____	_____
		Vice President of Human Resources	Date
Support	Do Not Support	_____	_____
		Director/Vice President (as required)	Date



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20 . Approval

The proposed project is approved and supports the goals and objectives of Hartnell College.

Support Do Not Support

Superintendent/President

Date