Proposal Approval Summary Form

This form must be completed, returned to the Grants Office, and reviewed by President's Cabinet before submitting a grant proposal. If you have any questions regarding this form or the proposal development process, please contact the Grants Office at grants@mtsac.edu.

Principal Investigator/Project Director

Name	Beta Meyer	Department	Biology
Email	emeyer@mtsac.edu	Phone	909-274-4149

Other Project Collaborators

Name		Department	
Name		Department	
Name		Department	
Name		Department	

Funding Opportunity Details

Opportunity Name	IUSE: Innovation in Two-Year College STEM Education (ITYC) Planning Grant
Sponsoring Agency	National Science Foundation
Pass-through Entity (if applicable)	
Sponsor Type	☐ Local ☐ State ☑ Federal ☐ Private
Proposal Type	☑ New ☐ Renewal ☐ Resubmission ☐ Amendment
Submission Deadline	Planning grant applications accepted on a rolling basis

Funding Amount	$200,000	Project Duration	2 years
Proposed Start Date	8/1/2025	Proposed End Date	7/31/2027

Does the opportunity require 501(c)(3) status?	☐ Yes ☑ No	If yes, the project team must coordinate the submission with the Mt. SAC Foundation.

Are indirect costs allowed? (check appropriate box)	☑ Yes ☐ No	Indirect Cost Rate (if applicable)	30% of salaries+benefits

Is match required? (check appropriate box)	☐ Yes ☑ No	Match Amount (if applicable)	
If match is required, how do you intend to satisfy this requirement?			

Project Summary

Use the following prompts to provide an overview of the proposed project. If desired, attach additional information to this form.

Project Description What need will the project address? What activities will be implemented?	Many STEM students seek esearch opportunities at Mt.SAC. The College has received grant funding to engage students in paid summer research in local labs (e.g., UCI, CPP); however, those projects are limited in the number of available spots. These programs turn away doens of interested students each year, many of whom are highly quallified. The Biology department proposes to provide a research opportunity on campus during the regular semester, as a research class, and give that training experience to a broader array of students. The project will use Bio 99 as the vehicle to create a research class with support from a novel funding opportunity - a collaboration with the National Science Foundation and a SEA-PHAGES research project sponsored by Howard Hughes Medical Institute.

Expected Outcomes What are the project's expected benefits/ outcomes?	This opportunity could allow students the less competitive route to research exploration and would increase the pool of students experiencing what research involves. It would allow them to take classes or work during the summer, requiring only a few hours on their Fridays during the regular semester. The PI anticipates that we could increase the impact by offering this undergraduate research opportunity as a Bio 99 class, ensuring that many and more diverse students, even those with less than perfect GPAs, could have an undergraduate research experience. Specifically, students will be mentored by Biology faculty as they engage in the collection and analysis of bacteria.

Partners If applicable, list partners and their roles in the project. Will Mt. SAC issue sub-awards?	Mt. SAC will collaborate with California State University, Fullerton, or another local university to utilize their electron microscopy supplies, equipment, and staff time to analyze collected bacteria as part of the proposed research project. Mt. SAC would initiate a subaward of approximately $10,000 annually for these services.

Budgetary Needs Describe the project's budgetary needs. For personnel, specify type(s). For faculty reassignment/ overload requests, specify the names and planned allocation of time.	Budgetary needs include overload LHE for the Principal Investigator, hourly compensation participating professors, and hourly wages for peer mentors and technical support, corresponding fringe benefits, travel and conference, instructional materials and supplies, subaward to Cal State Fullerton, and indirect costs. Please refer to the attached budget for more detail.

Sustainability Plan What is the plan for continuing grant activities beyond the project period?	NSF does not require sustainability. The pilot project would explore more accessible and affordable undergraduate research experiences for Mt. SAC students. Continuing the project beyond the grant period is possible if project outcomes are significant and student learning outcomes improve. The PI will integrate these results into the program review and resource allocation request process.

Assurances

☑ As the Project Lead, I acknowledge the responsibility associated with this role and will conduct the proposed project in accordance with the terms and conditions of the sponsoring agency and the policies of the College.

☑ If the proposal described herein is funded and accepted by the College, I will be responsible for meeting the requirements of the award, including, but not limited to, providing the proper stewardship of sponsored funds and submitting all required progress reports and deliverables on a timely basis.

☑ If sponsored funds are used for personnel, I understand that the College makes no ongoing commitment beyond the project period.

☑ Where funds are requested for lecture hour equivalents, I have reviewed this request with my Educational Administrator, and they support the reassignment/overload request.

Beta Meyer Digitally signed by Beta Meyer Date: 2024.11.22 08:42:19 -08'00'	11/22/2024	Professor, Biological Sciences
Signature of Project Lead	*Date*	*Title*

Approval

Approvals represent general approval of details outlined in the project summary, but they do not represent specific approval of personnel titles, classifications, salary rates, or other issues governed by College policy and collective bargaining agreements.

Jimmy Tamayo Digitally signed by Jimmy Tamayo Date: 2024.11.22 15:23:12 -08'00'	11/22/2024	Associate Dean, Natural Sciences
Signature of Responsible Administrator	*Date*	*Title*
Kelly Fowler Digitally signed by Kelly Fowler Date: 2024.11.22 18:42:05 -08'00'	11/22/2024	Vice President, Instruction
Signature of Responsible Vice President	*Date*	*Title*

Review by President's Cabinet

Date of Review	☐ Approved ☐ Conditionally Approved ☐ Denied

Comments	

DRAFT Budget Request - NSF IUSE Innovation in Two-Year College STEM Education Planning Grant

Senior Personnel	Year 1	Year 2	Total
Beta Meyer, Principal Investigator (reassigned): 2 semesters x 2 lecture hour equivalents (LHE)/semester. Includes estimated 3% cost of living adjustment (COLA) annually.	$ 8,458	$ 8,712	$ 17,170
Total Senior Personnel	***$ 8,458***	***$ 8,712***	***$ 17,170***

Other Personnel	Year 1	Year 2	Total
Faculty (hourly noninstructional rate) to oversee BIO 99 student research and collect/analyze data: 3 professors x 2 semesters x 16 weeks x 5 hours/week x $69.13/hour. Includes estimated 3% COLA annually.	$ 33,182	$ 34,177	$ 67,359
Peer Mentors (Student Assistant, Level II): 2 semesters x 3 mentors/semester x 16 weeks/semester x 5 hours/week x $18.75/hour	$ 9,000	$ 9,000	$ 18,000
Total Other Personnel	***$ 42,182***	***$ 43,177***	***$ 85,359***

Fringe Benefits	Year 1	Year 2	Total
Senior Personnel: 19.1% California State Teachers' Retirement System, 1.45% Medicare, 0.05% state unemployment insurance (SUI), 1.31% workers' compensation (WC)	$ 1,853	$ 1,909	$ 3,762
Faculty: 19.1% STRS, 1.45% Medicare, 0.05% SUI, 1.31% WC	$ 7,270	$ 7,488	$ 14,758
Peer Mentors: 1.31% WC	$ 118	$ 118	$ 236
Total Fringe Benefits	***$ 9,241***	***$ 9,515***	***$ 18,756***

Travel	Year 1	Year 2	Total
Travel - Domestic: PI to attend national educational research conference TBD: $1000 registration, $500 roundtrip airfare, $100 ground transportation, lodging for 4 nights x $250/night, meals & incidentals for 5 days x $95/day	$ 2,850	$ 2,850	$ 5,700
Travel - Domestic: Faculty (2) to attend educational regional educational research conference TBD: $750 registration, $350 roundtrip airfare, $100 ground transportation, lodging for 3 nights x $250/night, meals & incidentals for 4 days x $95/day	$ 4,660	$ 4,660	$ 9,320
Total Travel	***$ 7,510***	***$ 7,510***	***$ 15,020***

Other Direct Costs	Year 1	Year 2	Total
Materials and Supplies: standard bacteriology lab media, bacterial strains, electron microscopy supplies, and other materials to implement the research projects	$ 3,500	$ 3,500	$ 7,000
Consultants: University personnel with expertise in electron microsopy to analyze collected bacteria	$ 10,000	$ 10,000	$ 20,000
Total Other Direct Costs	***$ 13,500***	***$ 13,500***	***$ 27,000***

	Year 1	Year 2	Total
Total Direct Costs	$ 80,891	$ 82,414	$ 163,305
Indirect Costs (30% of Personnel and Fringe Benefits)	$ 17,964	$ 18,421	$ 36,385
Total Costs	**$ 98,855**	**$ 100,835**	**$ 199,690**