FACULTY MINI-GRANTS PROGRAM
Georgia College Math + Science = Success
FY16 Request for Proposals
DEADLINE: APRIL 20, 2015

The Georgia College & State University Math + Science = Success mini-grants program seeks to stimulate innovative projects in instructional approaches and content delivery to improve student learning in science, technology, engineering and mathematics (STEM) and STEM teacher preparation in two focus areas: 1) Teaching Innovation proposals to improve teaching and learning in introductory STEM courses at the university level; and 2) K-16 Learning Communities to promote higher education and public school partnerships in STEM-focused learning communities (see definition of Learning Communities below.) In addition, the program aims to seed projects that are competitive for external funding. This program is made possible by the University System of Georgia’s statewide initiative, Math + Science = Success. The USG STEM Initiative has three overarching goals:

1) To increase the number of K-12 students who are prepared for and are interested in majoring in STEM disciplines in college;

2) To increase the success and completion rates of college students majoring in STEM disciplines by
   a. Increasing the number of students majoring in STEM disciplines
   b. Supporting student retention and progression in STEM
   c. Increasing STEM degree completion;

3) To increase the number of qualified K-12 STEM teachers.

The maximum award is $7,000 and may be for an individual Georgia College faculty member or a team. Collaboration is encouraged and may take a variety of forms. In all cases grantees are required to measure and report the impact of the project on student learning using methods such as pre-post testing, comparisons groups, or qualitative methodologies. Prior grant recipients are eligible to apply but do not receive preferential consideration. Grantees will be required to submit interim and final reports and will be asked to share their work (in-progress and completed) at symposia with other grantees. We also anticipate that work from the mini-grants will be shared at state-level institutes.

PROPOSALS SHOULD INCLUDE THE FOLLOWING:

2. Abstract: The abstract should briefly describe the purpose of the project, the overall objective, project plans, anticipated results, and the potential impact. (250 word maximum)

3. Description of the project. Write a brief description of the project (no more than two pages) and include the following:
• **Identified needs.** Projects must be based on an identified need related to student learning. Provide evidence of this need. Describe any background or context reviewers will need to understand your project. Be specific.

• **Goals and objectives.** Clearly list and explain the goals and objectives you have set for the project. Identify one or more USG STEM Initiative goals and explain how the proposed project goals align with the USG STEM Initiative goal(s).

• **Potential for broad impact.** Explain breadth of impact this project may have on teaching and learning in STEM fields. Specifically, address how the proposed project broadens participation in STEM fields, improves engagement and quality of classroom instruction, or develops partnerships among K-12 and business institutions.

• **Project Activities.** Describe specific activities, responsible parties, and the timeline related to the goals and objectives listed above. Include descriptions of any products that will result.

• **Measurement of Project Impact on Student Learning.** The proposal must include a plan for examining the impact of the project on student learning. This will most likely require some type of design incorporating pre-post testing, comparisons groups, or qualitative methodologies. Qualitative designs that address students’ learning outcomes are also acceptable. If data cannot be collected in the current funding cycle, include plans for how the effects of the project will be studied and how results will be shared with the Georgia College STEM Initiative.

• **Dissemination Plan.** Describe how you plan to disseminate the results of your project. Dissemination may include presentations at professional conferences, publications, or ways you plan to share with other faculty members at Georgia College. (This is in addition to the symposium and institute described in the RFP.)

• **Project Sustainability Plan.** Describe how you plan to sustain/institutionalize the successful ideas that have been learned from your project? For example, how will you encourage adoption/broader participation at Georgia College using these best practices?

• **Outcome(s) of Previous Work.** Describe the results and outcomes of any early STEM mini-grant funded activities, and explain whether and how the current project would build upon earlier work.

3. **Budget tied to goals.** Use a separate page to provide a budget with brief explanations of how each request will further both project goal and objectives. (See budgeting requirements below.)

**Definition of K-16 STEM Learning Communities**

K-16 STEM learning communities are partnerships between university faculty members and K-12 teachers designed to address a particular problem or need related to STEM teaching and learning. A K-16 STEM learning community is not a workshop delivered by university professors. Rather, it is a collaborative relationship between K-12 and university teachers in pursuit of improved teaching and learning. Although frequently the goal of the STEM learning community is to enhance K-12 student learning, in a K-16 STEM learning community K-12 teachers, pre-service teachers, and university professors benefit from the experience.

**BUDGET**

Budget requests must be directly linked to carrying out the project and may include faculty release time, K-12 teacher stipends, and other associated expenses. Materials may be included as part of the budget only if they are used in the course of designing innovative strategies for improving teaching and
learning. Please note that the Georgia College mini-grant awards are considered USG-allocated state funds, and as such are subject to all applicable restrictions. In compliance with the stated USG policy, stipends can be only issued when proposed work is completed. Mini-grant stipends may not exceed $2,000 per person. In addition to available stipends for work associated with STEM mini-grant activities, each funded project that results in a submission for publication in a peer-reviewed journal by August 1, 2016 will be eligible to receive $400. A sample budget may include the following categories. Justify your expenditures in a brief narrative beneath the budget.

<table>
<thead>
<tr>
<th>Sample Budget Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stipends</td>
</tr>
<tr>
<td>• Faculty and collaborators</td>
</tr>
<tr>
<td>• Staff</td>
</tr>
<tr>
<td>• Student workers</td>
</tr>
<tr>
<td>Travel</td>
</tr>
<tr>
<td>Materials</td>
</tr>
<tr>
<td>Facilities</td>
</tr>
<tr>
<td>Professional Services</td>
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</tbody>
</table>

REPORTS

1. INTERIM REPORT: A brief interim report describing the implementation of the project that details how the project is progressing toward the stated goals. Include information on number of students impacted, professional partners, personnel involved, and preliminary data collected. (Due: January 2016)

2. PROFESSIONAL ACTIVITY UPDATES (e.g. publications or presentations): Faculty members can meet this requirement by reporting activities in Digital Measures and noting which activities are the result of Math + Science = Success funding.

3. FINAL REPORT: A final report that includes an evaluation and description of whether the project goals were met and the next steps in the project, e.g. external grants, scaling the project up, revising the project in light of assessment data. (Due June 3, 2016)

4. ARTIFACTS: Electronic copies of artifacts generated in the course of the project implementation, e.g. course activities, presentations, publications.

If funded, abstracts and project reports will be posted at the STEM website at [http://stem.gcsu.edu](http://stem.gcsu.edu).

SYMPOSIUM

All mini-grant award recipients and partners will be expected to attend the STEM Symposium in spring 2016 to share progress. You will be requested to present your findings to date and share products you have developed in a conference-style presentation of no more than 6-8 minutes.
REVIEW CRITERIA
Your proposal will be rated using the criteria listed below.
Please note that at least one member on each team must be Georgia College faculty member.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Possible Points</th>
</tr>
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<tbody>
<tr>
<td>Identified need is challenging and compelling</td>
<td>10</td>
</tr>
<tr>
<td>Goals and objectives are significant and are aligned with one or more USG STEM Initiative goal(s)</td>
<td>20</td>
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<tr>
<td>Potential for broad impact</td>
<td>10</td>
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<td>Project plan is based on identified need and will lead to successful implementation of project</td>
<td>15</td>
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<tr>
<td>Study is well designed and describes appropriate experimental or qualitative methodology and measures for examining the effects of the project on student learning</td>
<td>20</td>
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<tr>
<td>Plan for disseminating results</td>
<td>5</td>
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<tr>
<td>Plan for sustaining project</td>
<td>5</td>
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<tr>
<td>Evidence of collaboration</td>
<td>5</td>
</tr>
<tr>
<td>Budget expenditures are reasonable, justified, and directly linked to proposed plan</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Possible Points</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

DEADLINE
The deadline for proposal submission is **April 20, 2015** for the FY16 funding cycle.
Proposals submitted after deadline will not be considered.
Awards will be announced in June 2015.
The FY16 funding cycle begins July 1, 2015 and ends in May 2016.

SUBMISSION INSTRUCTIONS
1. Complete **cover sheet** (found on the following page)
2. Complete **abstract** - place abstract on cover page
3. Attach 2-page **abstract** (single-spaced, one-inch margins, 12pt type)
4. Attach 1-page **budget** (indicate whether you have applied for or received other funding to support this project)
5. Submit items 1-4 in a **single** MSWord (.doc or docx) or Adobe (.pdf) document attachment as **LastName_STEM15.doc**
6. Submit to **stem@gcsu.edu** by Monday, April 20, 2015.

Q&A SESSIONS
12:00—1:00 p.m. Wednesday, April 1: Pat Peterson Museum Education Room
2:00—3:00 p.m. Thursday, April 2: Pat Peterson Museum Education Room
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Application Cover Sheet

Maximum funding for any single grant: $7,000. Proposal must be limited to two pages plus a budget page, in addition to the cover sheet.

Principal Investigator:
Name_________________________________________ Date____________________
Georgia College Department ________________________________________________
Phone___________________________ Email____________________________________

Title of Proposal __________________________________________________________
________________________________________________________________________

Collaborators:
Name: ___________________________________ Affiliation_______________________
Name: ___________________________________ Affiliation_______________________
Name: ___________________________________ Affiliation_______________________
Name: ___________________________________ Affiliation_______________________
Name: ___________________________________ Affiliation_______________________

Proposal category (choose one)
__Teaching Innovations
__K-16 Learning Community

Abstract (250 words maximum)