

Science, Technology, Engineering & Mathematics (S.T.E.M.) Learning Community

Purpose

The purpose of the Science, Technology, Engineering and Mathematics (S.T.E.M.) Learning Community (SLC) at Florida A&M University (FAMU) is to provide a place of interaction, connection, encouragement, and support for students enrolled in a S.T.E.M. Education major or program. Through the S.T.E.M. Learning Community, students will find connections, identity, and purpose within their chosen discipline. The learning community will also provide an opportunity for participants to receive a S.T.E.M.

**certificate* approved by the Florida Department of Education and Florida A&M University. Ultimately, the group will vitalize the learning environment and increase the numbers of S.T.E.M. graduates from FAMU. The SLC will also serve as an opportunity for participants to become a certify teacher in the state of Florida in one or more of the S.T.E.M. major fields.

**Certificate components are still pending approval*

Mission

The mission of the S.T.E.M. Learning Community (SLC) at Florida A&M University is to create an intentional, inclusive community formed around common themes of Science, Technology, Engineering and Mathematics where students live and learn together. Engaging students' minds to seek knowledge and reflect the SLC invite students to integrate their learning in and out of class. SLC cultivates holistic student growth and enhance learning by fostering collaborative and enduring connections among students, faculty, and staff.

Goal

- Feel a sense of belonging with the University community (faculty, staff and students);
- Have a well-designed introduction to the FAMU belief of "provid[ing] a student-centered environment consistent with its core values";
- Explore with members of the faculty and staff connections between experiences inside and outside the classroom;
- Inquire into areas of personal academic interest in ways that are designed to help in settling in their major and in taking the first steps toward a calling or career;
- Be exposed to a service-learning experience in the context of education/philosophy;
- Prepare participants for the Florida Teacher Certification Exam

Outcomes

- Develop networks of peers and faculty with similar personal and career interests;
- Have an appreciation for diversity in people and experiences;
- Develop a sense of responsibility for and to others;
- Gain confidence in their academic abilities;
- By graduation student will have taken and passed all three tests of the Florida Teacher Certification Exam and be certified to teach in the state of Florida;
- See the connections between classroom learning and experiences outside the classroom

Benefit to all involved

- Faculty Research
- Graduate Research
- Undergraduate theory-to-practice
- Retention and Graduation numbers

Academic Programs

Students will benefit from:

- Group meetings with faculty and distinguished visitors in S.T.E.M. fields;
- S.T.E.M. related field trips and tours of research facilities;
- Programming designed to enhance academic success (time management, study skills);
- Multiple tutoring/working sessions hosted by graduate student

Civic Engagement/Volunteerism

Students will:

- Volunteer a minimum of 5 hours/semester in the FAMU DRS tutoring in Science and/or Math;
- Volunteer a minimum of 5 hours/semester in the Candidate Empowerment Center tutoring teacher education candidates preparing any of the FTCE tests;
- Volunteer with S.T.E.M. industries/organizations and the Florida Department of Education

Social Interaction

Students will:

- Participate in social events to cultivate relationships with fellow classmate;
- Build rapport with faculty/staff within their discipline

Faculty and students will host workshops where activities developed will be demonstrated to in-service educators. These workshops will serve as a “how-to” program

that will assist teachers recreate activities in their classrooms to enhance pupils knowledge on specific topic.

Implementation

All students in one or more of the S.T.E.M. majors are welcome to **apply* to the Learning Community. Students whose applications have been accepted will be placed under one of the following groups:

- Science
- Technology
- Engineering
- Mathematics

Each group will consist of education and non-education majors as well as a graduate student. Under the direction of the graduate student and the supervision of their designated faculty, participants will be charged to develop activities that can be replicated in the K-12 classroom. In addition, each team will present a final project related to their field at the end of the academic year. Each group will range from 5-7 students.

S.T.E.M. Certificate

The S.T.E.M. Learning Community participants will automatically be eligible to receive a S.T.E.M. Certificate. The certificate provides extensive background information to prepare and/or improve K-12 pre-service teachers content knowledge. The S.T.E.M. content is aligned with Common Core State Standards and will consist of 3-5 courses offered by faculty in the College of Education, College of Arts & Sciences, College of Science & Technology. The courses in the program are designed according to a sequence beginning in elementary school with increasing complexity as students proceed through the K-12 S.T.E.M. in preparation for college and careers in S.T.E.M.-related fields. This advanced certificate program provides educators with the knowledge, skills and resources for effective S.T.E.M. teaching and learning. The faculty of each school will coordinate the course offerings to provide customized and appropriate instruction for candidates.

List of Required Courses

To be determined

**Florida A&M University
College of Education
Candidate Empowerment Center
S.T.E.M. Learning Community Application**

Name: _____ Phone Number: _____

Mailing Address: _____

Email Address: _____ Employer: _____

If employed, circle approximately how many hours you work/week.

10-20 hours/week 20-30 hours/week 30-40 hours/week 40+

Major: _____ G.P.A.: _____

Gender: ___ F ___ M Race: _____ Classification: Fr. So. Jr. Sr.

Anticipated graduation date: _____

Have you ever considered becoming a teacher? Yes No

Have you ever tutored or assisted a peer in academics? Yes No

If so, what level? Elementary Secondary Post-Secondary

Please explain your interest in Science, Technology, Engineering and/or Math:

Please describe your professional goals:

Other community interests or involvement:

Please explain how you will benefit from this program:

References (not family members) Include name, phone and/or email, and relationship to you.

	Name	Phone Number	Email address	Relationship
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1.				
2.				
3.				

How did you hear about the CEC's mentoring Program? (Check all that apply)

- CEC
- Friend
- Academic Advisor
- Brochure
- Web site
- Other (please specify)

APPLICANT RELEASE STATEMENT

I, the undersigned, hereby state that if accepted as an applicant, I agree to abide by the rules and regulations of the S.T.E.M. Learning Community program. The Science, Technology and Math Learning Community are a sponsored program by the Candidate Empowerment Center in the College of Education. Its purpose is to help graduate more S.T.E.M. majors certified to teach in the state of Florida. The SLC requires a minimum of 10-20 hours/month of workshops, group meetings and/or civic engagement. If applicant is accepted, they must comply with such. Failure to do so, will result in removal from program.

To the best of my knowledge and belief, all statements in this profile application are true and accurate.

(Signature)

(Date)

(Printed Name)