TEXAS TECH UNIVERSITY
STEM CENTER
FOR OUTREACH, RESEARCH, AND EDUCATION
(STEM CORE)

SCOPE AND STRUCTURE
(Proposed November, 2016)

VISION

STEM CORE will be a nationally recognized resource that performs and facilitates collaborative and interdisciplinary activities in STEM education, outreach, and research.

MISSION

The mission of STEM CORE is to integrate and deepen the impact of STEM education, outreach, and research at Texas Tech University and beyond.

SCOPE

The scope for STEM CORE is derived from its vision and mission in the realms of STEM education, outreach, and research. All three are weighted equally within the scope of STEM CORE, and includes training and professional development. The activities of STEM CORE are in service to and in collaboration with our stakeholders. Stakeholders include but are not limited to Texas Tech University faculty, staff, and administrators, K-12 educators, and informal science community partners.

Although STEM CORE aims to have a role at the national level in STEM issues, the primary mission of STEM CORE is locally based, that is, to improve STEM outreach, research, and education at Texas Tech University and surrounding communities. STEM CORE acts to facilitate interaction, community, and knowledge development in outreach, research, and educational activities among stakeholders.

The mission of STEM CORE includes, but is not restricted to:

OUTREACH: STEM CORE facilitates and coordinates outreach between Texas Tech University and our stakeholders.

RESEARCH: STEM CORE helps to identify individuals and facilitate interdisciplinary teams in the development of research projects, ideas and grants, and aids in the creation of broader impact statements and boilerplate information as appropriate for STEM grants. STEM CORE will actively facilitate sustainability efforts.
EDUCATION: STEM CORE furthers undergraduate and graduate opportunities in the areas of STEM education and education research. STEM CORE promotes and coordinates educational opportunities, such as, but not limited to topical seminars, professional development and training, and models of STEM learning.

STRUCTURE

STEM CORE is composed of three stakeholder groups, each with different interests, missions, and purposes. The stakeholders can be grouped broadly according to their functions: (1) internal oversight, (2) practitioners, and (3) extramural and extra-disciplinary education and outreach. The stakeholder groups are delineated below:

**Internal Oversight:** This group includes the Director, Associate Directors, and Sr. Program Administrator. The group will meet at regular intervals (generally monthly, unless extenuating circumstances occur), and is charged to

- Enable and foster teams for multidisciplinary outreach, research, and education
- Facilitate grants for research and education in STEM
- Assist others in grant development through broader impacts and boilerplate information
- Administer outreach activities consistent with the interest of STEM CORE
- Support and provide educational opportunities in STEM
- Disseminate information through multiple venues, including a seminar series and updates
- Interact with and inform Texas Tech upper administration in areas of STEM outreach, research and education.

In addition to the list above, the Director will oversee the general activities of STEM CORE and have fiduciary responsibilities for the center.

The number of Associate Directors shall be no less than six typically composed of faculty members from the following: two (2) from the College of Arts and Sciences, one or two (1-2) from the College of Education, one (1) from the College of Engineering, one (1) from the College of Agricultural Science and Natural Resources, one (1) from the College of Human Sciences, one (1) from the College of Business.

The Sr. Program Administrator has the following responsibilities:

- Help to develop, coordinate and facilitate new and existing outreach programs for K-12 students, perspective/current TTU students and international students
- Support grant writing in STEM areas
- Website development, design and upkeep for new and current STEM outreach, research, and education programs and initiatives
- Administer budget and financial aspects of programs and the Center
- Coordinate monthly seminars
• Assist, facilitate, and support the development of STEM outreach, research, and education grants that are supported by the Center
• Act as a liaison between STEM CORE and its constituency groups
• Maintain historical information related to STEM CORE and general STEM activities on campus.

Practitioners: Three levels of practitioners exist for faculty and staff, dependent upon the extent of their involvement within the vision and mission of STEM CORE. Practitioners may move between levels, depending upon interest and level of activity. The practitioner group, or their subgroups, will meet at least once a semester. Practitioners must attend at least one meeting a year.

a) Affiliates: Affiliates are faculty and staff who wish to be involved with STEM CORE in a peripheral manner, or who wish to utilize the resources, both physical and intellectual, of the Center. In order to be an affiliate, one is expected to fulfill the following requirements:

i) Have identified oneself as being interested in the mission and vision of STEM CORE through sign up on the STEM CORE website

ii) Have attended at least one STEM CORE activity within a calendar year

b) Members: In order to be a general member of STEM CORE, faculty or staff are expected to meet the affiliate requirements and regularly fulfill at least two of the three requirements:

i) Submit or be a part of a submission of at least one STEM, STEM education, or STEM outreach grant

ii) Develop or be engaged in at least one STEM outreach activity or program

iii) Attend STEM CORE activities

c) Fellows: STEM CORE Fellows are expected to have a vested interest in the mission and vision of STEM CORE, and to go above and beyond the requirements for membership. In order to become a Fellow, the faculty or staff member must have the approval of the Director and Associate Directors and fulfill all of the requirements to be a regular member and one or both of items below:
i) Have a recognizable track record in STEM research, education, or outreach funding

ii) Have a track record of sustained STEM outreach activity and consistently reported on its efficacy at a regional or national meeting or published the results in a peer-reviewed journal

**Extramural and Extra-Disciplinary Education and Outreach:** This group includes stakeholders who provide K-12 or informal STEM education within the community and on the TTU campus. This group will collectively be known, in this document, as the Executive Council. There is no set number of members of the Executive Council, but each member must have an affiliation not related to STEM CORE. The group will meet quarterly and members will:

- Act as an advisory body concerning issues related to general STEM education and informal STEM practices within the community
- Serve as liaisons between the TTU campus and the broader community
- Help evaluate the efficacy and utility of proposed K-12 outreach and education activities, especially those proposed for grants
- Aid TTU faculty and staff in matters of STEM outreach, education, and research
- Provide outreach and educational opportunities for TTU faculty and staff involved in grant and grant writing activities
- Participate in at least one STEM CORE related activity per year