Underrepresented populations in STEM

It is estimated that 1 million additional STEM graduates will be needed in the next decade to fill the growing market demand.1,2

In 2010, 57% of STEM degrees were conferred to women, but only 10% to blacks and 9% to Hispanics. Minority representation in mathematics was only 11.4%.3

Enrollment of minorities in STEM majors (34.1%) is

No grant writing incentives or workshops

General Methods

1. Faculty leaders will attend the Association of American Colleges and Universities (AACU) Annual STEM Institute.

2. Model courses and syllabi will be developed to reflect principles of inquiry-based, learning including learning outcomes described by ABET,7 the AACU,8 the National Center for Appropriate Technology (NCAT),9 and Cross et al.10

3. Academic units (Advisement, Student Affairs, Marketing) will develop a communication strategy for each faculty, students, and administrators.

4. The program will be advertised at the beginning of the fall semester. Program applications will be accepted and evaluated during the first semester. The first half of the students will be admitted at the end of the semester.

5. Training sessions will start at the beginning of the spring semester. Course syllabi and materials will be submitted for approval. The proposal materials will be submitted to the committee on a yearly basis.

6. Self, peer, and student evaluations will be administered at the end of the semester. Faculty will receive the second half of the subaward.

7. An external program evaluator will review the program.

Management Plan

- The Office of Undergraduate Research and the Office of Institutional Research will monitor retention, graduation rates, academic performance, participation in undergraduate research activities, and activities that reflect excellence in undergraduate research (e.g., presenting at national conferences and submitting articles to undergraduate research journals).

- Student satisfaction will be measured with Student Assessment of Learning Gains (SALG).

Program for Institutional Impact

- Syllabi and evaluations will be used to monitor compliance.

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