

COMMENTS ON PROPOSED CHANGES

STEM EDUCATION
UPRAC 3/12/15

STEM

- ◆ UTeach replication site
- ◆ Initiated in 2010
- ◆ Seven degree tracks
 - Distinguished by BSEngineering:STEM Ed
- ◆ 78 majors

- ◆ Mission: To increase the number and quality of STEM teachers

Key Components

- ◆ Degree in STEM discipline
- ◆ Master Teachers
- ◆ Mentored teaching experiences
 - Elementary school, middle school, high school

| Course | Focused Observations | Teaches |
|--------------|----------------------|-----------|
| STEM 1030 | 2 | 4 |
| STEM 2020 | 3 | 3 |
| STEM 4010 | 3 | 4 |
| TOTAL | 8 | 11 |

Description of Students/Graduates

DISTRIBUTION OF MAJORS (Taken from Banner) N=78 (%)

| Mathematics | Biology | Chemistry | Physics | Engineering | Geology |
|-------------|-----------|-----------|---------|-------------|---------|
| 30 (38.5) | 28 (35.9) | 7 (9.0) | 6 (7.7) | 4 (5.1) | 3 (3.8) |

SUMMARY OF STEM EDUCATION GRADUATES

| Recorded | | | Projected | Yearly Average |
|-----------|-----------|------------|------------------------|----------------|
| 2012-2013 | 2013-2014 | 2014-2015* | 2015-2016 [#] | 9.25 |
| 5 | 13 | 8 | 11 | |

*Includes current AT students slated to graduate this Spring

[#]Based off projected FALL 2015 and Spring 2016 enrollment in AT and PBI

10 Year Progression

PROGRESSION OF MAJORS

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| SOE | 60 | 67 | 76 | 59 | 83 | 54 | 33 | 12 | 1 | 1 |
| STEM | | | | | | | 2 | 56 | 57 | 76 |
| TOTAL | 60 | 67 | 76 | 59 | 83 | 54 | 35 | 68 | 58 | 77 |

PROGRESSION OF GRADUATES

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--------------|-----------|-----------|----------|-----------|----------|----------|----------|-----------|-----------|-----------|----------|-----------|
| SOE | 15 | 11 | 6 | 10 | 6 | 8 | 1 | 12 | 11 | 2 | | |
| STEM | | | | | | | | | 5 | 13 | 8 | 11 |
| TOTAL | 15 | 11 | 6 | 10 | 6 | 8 | 1 | 12 | 16 | 15 | 8 | 11 |

Impact of Proposed Changes

- ◆ No Master teachers
- ◆ Loss of integrative teaching experiences throughout curriculum
- ◆ Change in curriculum to replace core STEM Education courses with current EDUC courses