

UNIT REPORT

Mathematics and Statistics, Department of
Assessment Plan Summary

Mathematics and Statistics, Department of

Deliver Current, Rigorous Curricula

Goal Description:

The department will insure that all curricula meet current professional standards and will insure that the rigor of these curricula are monitored and modified appropriately

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

State Board Of Educator Certification (SBEC) Standards

Performance Objective Description:

The department will align its curriculum with the SBEC curriculum standards for MATH 3381

RELATED ITEM LEVEL 2

SBEC Standards

KPI Description:

The department will offer MATH 3381 in alignment with the State Board of Educator Standards. There will be a one-to-one correspondence with at least two of the SBEC standards for a mathematics generalist.

Results Description:

MATH 3381 is offered every semester: 5 sections in Spring 2017, and 6 sections in Fall 2017. There was a threat of the College of Education removing this course from the curriculum because of conflict with LoneStar's curriculum, but present indications (late Spring 2017) seem to point toward that issue being resolved. So we are comfortable that MATH 3381 will continue to be offered, resulting in continued excellence of teacher preparation.

RELATED ITEM LEVEL 3

MATH 3381

Action Description:

Even though LoneStar requires MATH 1314 (plus their versions of MATH 1384 and 1385) for future school teachers, we will continue to not require MATH 1314 (college algebra) as a required course for our future teachers.... we strongly feel that not only is this not a course best suited for students hoping teach young children, but more importantly a 3000-level course better allows us to present the mathematics content at the depth that is needed for thorough comprehension by a future teacher.

We will continue to work with the College of Education to make our case that MATH 3381 is the better option over MATH 1314.

Procure Appropriate Resources To Facilitate The Academic Mission Of The Department

Goal Description:

The department will monitor the classroom, laboratory, research, and out-reach (service) needs of the unit. Budget requests will reflect these needs.

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

Procurement Of Technology

Performance Objective Description:

The department will procure hardware and software relevant to the research and instructional needs of its faculty.

RELATED ITEM LEVEL 2

Requests For Equipment

KPI Description:

The department will submit budget requests for new technology equipment.

Results Description:

Because of the lack of computer labs to be used as classrooms, we requested funds to purchase laptop carts with enough machines for 40 students to use in a classroom.

RELATED ITEM LEVEL 3

Request for mobile computing station

Action Description:

We included a request for two laptop carts in the 2017-18 budget, but as of 8/1/17, this request was denied.

Provide Appropriate Personnel Resources For The Unit

Goal Description:

The department will assess the personnel (staff and faculty) needs of the unit on an annual basis. Annual funding requests will reflect these needs and hiring decisions will be based on these needs. The department office will provide appropriate resources and encourage faculty and staff to participate in development opportunities.

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

Procurement Of Personnel

Performance Objective Description:

The department will maintain personnel to effectively manage all three areas: mathematics, mathematics education, and statistics.

RELATED ITEM LEVEL 2

New Hires

KPI Description:

The department will submit Preliminary Budget Request forms requesting hires for the department's personnel needs.

Results Description:

Because of priorities within the college, no new mathematics personnel was requested in the most recent budget request for new initiatives. However, one math faculty member will be finishing his third of three years of half-time retirement status. This faculty member taught no upper-level math courses. Consequently, in Fall 2018 we will be able to hire a new tenure-track assistant professor able to teach upper-level undergraduate and graduate courses, effectively increasing the number of worthy math faculty by one.

In addition, a senior statistician suddenly announced his full retirement in Spring 2017. After a year with two visiting faculty, we will be able to hire two assistant professors of statistics beginning Fall 2018, increasing the number of statistics faculty in the department from 6 to 7.

Summary: Assuming no further resignations or retirements, Fall 2018 will see the department with 31 active tenure track faculty positions, up from 29 currently.

RELATED ITEM LEVEL 3

New faculty hires for 2017-18

Action Description:

We posted two ads for visiting assistant professors of statistics. We were able to fill only one of them, but in Fall 2017 we will be hiring two assisant professors of statistics. Because our new chair is a statistician, this additional position will alleviate some of the burden (such as mentoring M.S. students) placed on the faculty of our statistics program.

Provide Support Of Faculty Activities

Goal Description:

The department will insure that the faculty have sufficient input in issues related to teaching schedules and professional development opportunities.

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

Faculty Travel

Performance Objective Description:

The Department will closely monitor the amount of money allocated for faculty travel in 2013-14. In particular, a survey of the faculty will be performed, asking if the current amount allocated is sufficient. Adjustments will be made accordingly.

RELATED ITEM LEVEL 2

Travel Allocation

KPI Description:

The Department will increase the amount of money allocated for faculty travel to conferences. Our goal is to raise travel stipends by 20%.

Results Description:

We received a 5% increase in O&M beginning Fall 2016. This increases the amount of travel avalible to faculty by roughly \$5500. In addition, we will receive an additional \$5000 in distance learning funds beginning Fall 2018. Most all be used for faculty travel.

The dean's office continues to find student travel.

These additional funds are welcome, but our faculty is still growing. With retirements producing younger faculty who travel much more than faculty near the end of their career, travel funds will continue to be sought.

Additional travel funds

Action Description:

For the Fall 2017-Spring 2018 year, we should have roughly \$8000 more to spend on faculty and student travel. Even though we have two additional faculty members (with visiting positions and filling vacant positions) this should provide a few more trips for faculty to take.

In addition, there are several grant opportunities (Frontier Set, STEM Center) which will allow form some faculty to travel to professional development workshops, alleviating some of the pressure on limited travel funds.

Update to Previous Cycle's Plan for Continuous Improv

Previous Cycle's Plan For Continuous Improvement (Do Not Modify):

A new Lecturer was hired to teach calculus, precalculus, and other courses as well as collect data on the effectiveness of our calculus placement process. For example, are we doing well in MATH 1410 preparing students for MATH 1420 (calculus)? We hope to have, by Fall 2017, and answer to these questions.

Update of Progress to the Previous Cycle's PCI:

Hiring a new Lecturer will hopefully enable us to redesign our precalculus course (MATH 1410). Hopefully our new 5-year BS/MS program in mathematics will be approved so that we can pursue a similar one for statistics.

Adapting to student and faculty growth

Closing Summary:

Challenges for 2017-18 (and beyond) include:

1. increase in demand for first-year courses. We will continue to hire adjunct faculty, and consider requesting new Lecturer lines.
2. limits on office space for faculty. With the construction of the new biology lab building, space in LDB will begin to be available in Fall 2018.
3. TX legislature mandating corequisite models to be used for dev math. By Fall 2018, 25% of dev math students (increasing to 50% and 75% in consecutive years) must be enrolled in core classes (as opposed to dev math courses). This will increase demand for 1000-level math courses and require additional funding for tutors and support classrooms.
4. handling the Provosts' initiative requiring all incoming students register for a math course until all math requirements are met. This puts pressure on instructors of first-year courses. Communication with registrar and coordination with student success offices are a must.
