KENTUCKY STATE UNIVERSITY

FACULTY SENATE
CURRICULUM COMMITTEE

FSCC#_12/13 - 32_  Effective Date __Fall 2013__

---

ACADEMIC UNIT:  _MASC-MAT_  DATE SUBMITTED:  _September 20, 2012_

1. BRIEF EXPLANATION OF PROPOSED CHANGE:

Creation of a Pre-Mathematics Major and Requirements for Admission to the Mathematics Major. (no new courses or course changes)

2. CHECK ITEM(s) BELOW FOR CHANGES DESIRED:

- New Degree Certification
- Deletion of Degree or Certification
- X New or Revised Major
- Deletion of Course
- New or Revised Minor
- Revised Degree or Certification
- New Course(s)
- Revised Course
- Course Level (number) Change
- Other (specify below):

---

I. Dean's Action:

- Approved
- Disapproved
- Returned for Recommended Change

(Signature)  _Date: 4/16/13_

II. Curriculum-Committee Action:

- Approved
- Disapproved
- Returned for Recommended Change

Chairperson: (signature):  _Date: 4/23/2013_

III. Faculty Senate Action:

- Approved
- Disapproved
- Returned for Recommended Changes

Senate President (signature):  _Date: 4/25/13_

IV. Provost/Vice President Academic Affairs (not required for courses):

- Approved
- Disapproved
- Returned for Recommended Change

Provost/VPAA (Signature):  _Date:__

V. President's Action (not required for courses):

- Approved
- Disapproved
- Returned for Recommended Change

President (Signature):  _Date: 5/16/13_

---

Final Faculty Senate Approved form As Of 9/15/06

---

Kentucky State University is an equal educational and employment opportunity/affirmative action institution
PROGRAM CHANGE PROPOSAL

ACADEMIC UNIT: MASC-MAT

DATE PREPARED: October 20, 2012

PRIMARY AUTHOR(S): Robert Hebble

ACADEMIC DISCIPLINE
FACULTY APPROVED: [Signature]
(Committee Chairperson's Signature)

CHAIRPERSON/DEAN
APPROVED: [Signature] 4/16/13
(Chairperson's/Dean Signature)

1. DESCRIPTION OF CHANGE

Creation of a Pre-Mathematics Major and Requirements for Admission to the Mathematics Major.

(No new courses or course changes are involved.)

2. STARTING WITH:

_X_ Fall, ___ Spring, ___ Summer, 2013 Year

3. EXPLANATION AND JUSTIFICATION FOR REQUESTED CHANGE

Proposed Program Change:

Create a Pre-Mathematics Major designation for students who have not yet completed MAT 120 with a C or better.

Following successful completion of this course, a student may apply in writing to the Division of Mathematics and Sciences for acceptance into the Mathematics Major. The student will then complete a Change of Major Form to formally enter into the Mathematics Major. Completion of the above course with a C or better, or placement into MAT 131 is the only criterion for acceptance into the major. Pre-majors are in no way restricted in any way from applying for scholarships, registering for courses, etc.

Both Pre-Mathematics majors and Mathematics majors are to be advised by Mathematics faculty.

Final Faculty Senate Approved Form as of 10/4/89

Kentucky State University is an equal educational and employment opportunity/affirmative action institution
Rationale:

Incoming students clearly have gotten the message that STEM degrees are desirable. In the last few years, many of these students have come in declared as math, chemistry, or biology majors. Unfortunately, many of these students are woefully under-prepared for the challenges of a STEM degree program, and soon end up changing majors.

Establishing a Pre-Mathematics Major designation and instituting requirements for acceptance to the Mathematics Major will have three desired effects:

1) Students will be aware “up front” that they need to take courses seriously and do well in order to be allowed into the major,

2) KSU will gain a more realistic measure of retention/persistence of Mathematics majors. As it stands, we will have very poor retention/persistence if the trend continues of under-prepared students with unrealistic expectations continuing to declare STEM majors upon entrance to the University, and

3) The Pre-Mathematics major will require students who intend to declare a Mathematics Major but are not ready for calculus to be advised by Mathematics faculty, who can guide them efficiently toward graduation in the major.

Pre-majors are in no way restricted in any way from applying for scholarships, registering for courses, etc. Only their designation in BANNER will change, which will change the numbers reported to the CPE.

Wording for KSU Catalogue: New portion is highlighted below

**Major in Mathematics**

Knowledge of mathematical facts and procedures is indispensable to a satisfactory understanding of every field of science. This is true for both the physical and biological sciences, and even the humanities are influenced by the traditions of mathematical knowledge. Mathematical skills and processes are central to the development and practice of critical thought and expression. Physics is the science that seeks to employ mathematics to explain the universe and its phenomena. Courses in mathematics and physics at Kentucky State University are designed to integrate theoretical and practical topics.

The Division of Mathematics and Sciences offers a Mathematics degree with four options: Pure Mathematics, Mathematics/Applied (Pre-Engineering), Actuarial Science, and Mathematics with Teaching Certification. Minors in Mathematics and Physics are also offered. Additionally, a double major in Mathematics and Computer Science is offered.

**Students who desire to pursue a mathematics degree option should declare a Pre-Mathematics major.** Once a student places into MAT 131 (or higher required mathematics major course), he or she may request in writing to the Division of Mathematics and Sciences to convert to a Mathematics major. Following verification of the successful entrance into this course, the student will be designated as a Mathematics major. Both Pre-Mathematics and Mathematics majors are advised by mathematics faculty advisors. Pre-majors are in no way restricted from applying for scholarships, registering for courses, etc.