Mathematics Placement

This letter provides information for all students about placement into mathematics courses at the University of Kentucky. During the conference, your advisor will be able to answer questions which are specific to your major. Some additional information about placement is available at:

http://www.math.uky.edu/undergrad/placement

We are committed to placing every entering student in a course at the appropriate level that will prepare them for their chosen major. We offer two on-line placement exams, an Algebra Placement Exam and a Calculus Placement Exam, to help you and your advisor determine which mathematics course is most appropriate for you. Your advisor will consider both your mathematics ACT or SAT sub-score and your on-line placement examination score when helping you determine which course you should take. You will be receiving an e-mail prior to your advising conference with instructions for taking the placement examination.

A variety of placement tests are being given throughout the state of Kentucky including the Compass exam and the KYOTE College Readiness Exam. Although we are not offering these exams at UK, we will accept verifiable scores for these two exams for placement into MA 111, *Introduction to Contemporary Mathematics*. Detailed prerequisites may be found in the University course catalog; however, we summarize the guidelines for placement for convenience. Students entering with some college credit will need to refer to the bulletin to determine their placement.

Mathematics Course	*Math ACT*	*Math SAT*	*Compass Algebra*	*2010 KYOTE College Readiness*	*Algebra Placement*	*Calculus Placement*
UK 090, Mathematics Readiness Workshop	18 or below	450 or below				
MA 111, Intro. Contemp. Math.	19 or above	460 or above	36 or above	22 or above	45 or above	
MA 109, College Algebra	21 or above	510 or above			60 or above	
MA 112, Trigonometry	21 or above	510 or above			60 or above	
MA 110, Analytic Geom. and Trig.	23 or above	540 or above			80 or above	50 or above
MA 123, Elementary Calculus	26 or above	600 or above				60 or above
MA 113, Calculus I	27 or above	620 or above				75 or above
MA 137, Calculus I with Life Sci. Apps.	27 or above	620 or above				75 or above

Comments:
1. Students who have not taken Algebra II in high school should take UK 090.
2. Students who enroll in MA 113 should have completed one year of high-school mathematics past Algebra II that includes the study of trigonometry. Typically, students take pre-calculus after Algebra II.
3. Many students find that they are placed in a course that repeats material they studied in high-school. While this may be disappointing, a strong foundation in mathematics should be beneficial in subsequent mathematics courses and courses that use mathematics.

Who should take a placement examination?
We believe that all students who plan to take a mathematics course should take a placement examination. We encourage all transfer students to take the placement examination. ***The College of Engineering requests that all of their entering students take a placement examination.*** A placement examination is mandatory for all students with a Math ACT score of 26 or below. The examination will provide additional information to the student and the advisor to help determine the proper placement. The exam may give a student the option of entering a more advanced mathematics course.

Which placement examination should I take?
The Department of Mathematics offers two placement examinations: an Algebra pre-test and a Calculus pre-test. Each of these exams is twenty multiple-choice questions and covers the material that a student should master before entering one of our courses. Students who have a Math ACT sub-score of 22 or below should take the Algebra pre-test in order to determine if they are eligible for UK 090, 111, 109, 112, or 110. Students with a Math ACT sub-score of 23 or above should take the Calculus pre-test in order to determine if they are eligible for MA 110, MA 123 or MA 113.

May I use a calculator on the placement examination?
Students may use a calculator that does not have symbolic manipulation capabilities and meets the ACT calculator policy (see http://www.actstudent.org/faq/answers/calculator.html). Students who wish to use a calculator must use their own calculutor. Calculators will not be provided.

What are the mathematics requirements at the University of Kentucky?
All students at UK must fulfill the requirements of the General Education program and the requirements of his or her major. Students may take a mathematics course because the course satisfies the General Education Quantitative Foundations I requirement or a major requirement. These requirements are detailed in the University Bulletin (http://www.uky.edu/Registrar/bulletinCurrent/toc2.htm).

What course should I take?
Most entering students will take one of the following courses. We urge students to take the most advanced course for which they meet the placement guidelines. This will give the most flexibility in choosing a major.

***UK 090**, Mathematics Readiness Workshop.* This course covers the material that is typically taught in Algebra II and will help prepare a student to begin the study of college-level mathematics. Students entering with Math ACT 19 or 20 may use this course to prepare for MA 109.

***MA 111**, Introduction to Contemporary Mathematics.* This course satisfies the General Education Quantitative Foundations I requirement. Students entering with Math ACT 19 or 20 may use this course to prepare for MA 109. Students who use this course to prepare for MA 109 must earn a C in MA 111 before taking MA 109.

***MA 109**, College Algebra.* This course helps to prepare students for our Calculus courses. Note that this course does not satisfy the General Education Quantitative Foundations I requirement.

***MA 112**, Trigonometry.* Students who plan to continue to MA 113 may take MA 109 and 112 together to prepare for MA 113. Note that this course does not satisfy the General Education Quantitative Foundations I requirement.

***MA 110**, Analytic geometry and trigonometry.* This is our pre-calculus course and prepares students for MA 113. This course is four credit hours, while MA 109 +112 requires five credit hours. Note that this course does not satisfy the General Education Quantitative Foundations I requirement.

***MA 123**, Elementary Calculus*. A brief calculus course that satisfies the General Education Quantitative Foundations I requirement and is part of the major requirements for several majors in the biological sciences and economics.

***MA 113**, Calculus I.* A four or five hour calculus course that satisfies the General Education Quantitative Foundations I requirement and is part of the major requirements for many majors in the sciences and engineering, and may usually be substituted for MA 123. Students who enroll in MA 113 are encouraged to take the supplemental workshop, MA 193.

***MA 137**, Calculus I with Life Science Applications,* A four hour calculus course that satisfies the General Education Quantitative Foundations I requirement, is part of the major requirements for some majors in the Biology, and may usually be substituted for MA 123.