

Proposed Amendment to Curriculum Proposal Math 12-035

Students with ACT-Math scores below 19, except those who have credit for developmental or college-level mathematics courses deemed appropriate by the Mathematics Department, are required to enroll in special sections of Math 1010, 2150, and 2100. These special or “enhanced” sections are to provide additional learning supports, including but not limited to additional weekly attendance hours, regular deadlines, integrated tutorial assistance, and instructor supervision. Secondary diagnostic tests may be developed to determine students’ readiness for these college-level courses, with test content based on general education outcomes for mathematics and statistics.

Rationale

UTC admits a large number of students who are mathematically weak. For UTC’s 2011 freshman class, about 25% had Math-ACT scores below 19. This statistic is not likely to change dramatically in the near future. Since we admit these students, we are in part responsible for their success at UTC. Effective learning supports should be part of the bargain.

Educational research and extensive experience at universities around the country strongly indicate that most students need to be provided with a highly structured learning environment in order to succeed. Both MTSU and the University of Memphis seem to be having good results using enhanced sections of their entry level math courses.

The ACT-Math cut-off of 19 makes sense for several reasons. According to ACT, students with ACT-Math scores below 19 are most probably very weak mathematically. At most Tennessee community colleges, students with ACT-Math < 19 are required to take developmental courses before enrolling in the college-level courses specified in Math 12-035. At most Tennessee public universities, students with ACT-Math < 19 are required to have completed developmental courses or other special courses, or to enroll in enhanced sections of college-level courses.

The UTC English Department is already using a similar approach for freshman English composition, using USTU 1999. USTU 1999 is a temporary course that can be offered for a limited time without the approval of the Curriculum Committee or Faculty Senate. The Mathematics Department is also planning to use a USTU 1999 course this fall for weaker students who need to take courses prior to calculus. This short-term approach can also be employed for other weaker students this coming fall.