

Rationale for temporary Kent Core status for three new math courses

The state has recently issued a directive that requires Ohio Math departments to fully implement the most rigorous interpretation of the remediation free standards for AY 14-15. To do this we must place students who achieve a 22 or better on the Math ACT (or equivalent) into non-remedial courses that advance them in their major. It is our objective to achieve this goal without reducing student chances of success and without increasing credit hour load.

For Fall 14, we have already put in place and scheduled Introductory Statistics (Math 10041) and a revised Explorations in Modern Math (Math 11008) to cater for the needs of students in programs that require little algebra. These courses are open to all students with a Math ACT of 22 or higher.

We must now cater for the needs of students in algebra-intensive majors. We plan to do this while maintaining or reducing (never increasing) the credit hours students will take, compared with the credit hours they would have taken last year.

Currently, many "algebra-intensive students" with a Math ACT of 22 or higher place into a remedial course, primarily Basic Algebra III (Math 00023) or Basic Algebra IV (Math 00024), but sometimes lower. Conversely, many students with a Math ACT of 21 or lower place into a College Algebra course (Math 11009 or Math 11010) or higher; fortunately these students will not be affected.

We need to create college level (as measured by outcomes, not prereqs) algebra courses to bridge the gap for "remediation free students" in algebra-intensive majors who are under prepared for Modeling Algebra (Math 11009) or Algebra for Calculus (Math 11010). These courses will substitute for Math 11009 or Math 11010 only for under prepared students who are deemed remediation free.

Scheduling for the new courses can be achieved through cannibalization of slots for existing courses that will now be redundant; in particular we expect enrollment in Modeling Algebra (Math 11009) to decrease significantly.

We are requesting temporary Kent Core status for three new courses, Modeling Algebra Plus, Algebra for Calculus Plus, and Algebra for Calculus Stretch II to be taught as sections of Math 20095 in AY 14-15, pending establishment of "permanent" new courses for Fall 15.

- Modeling Algebra Plus (5 credits) is a combination of Basic Algebra III (2 credits) and Modeling Algebra (4 credits.)

The one credit hour saving is achieved by efficiencies associated in part with reducing the review materials currently taught in Modeling Algebra. The outcomes of Modeling Algebra Plus include all outcomes of Modeling Algebra, so the courses should be considered as satisfying equivalent requirements and prerequisites.

- Algebra for Calculus Plus (4 credits) is a combination of Basic Algebra IV (2 credits) and Algebra for Calculus (3 credits.) The one credit hour saving is achieved by efficiencies associated in part with reducing the review materials currently taught in Algebra for Calculus. The outcomes of Algebra for Calculus Plus include all outcomes of Algebra for Calculus, so the courses should be considered as satisfying equivalent student requirements and prerequisites.

- Algebra for Calculus Stretch II (3 credits) is the second course in a Stretch sequence. The first course in the sequence is Algebra for Calculus Stretch I (3 credits). Taken together, these courses are a combination of Basic Algebra III (2 credits), Basic Algebra IV (2 credits) and Algebra for Calculus (3 credits.) The one

credit hour saving is achieved by efficiencies associated in part with reducing the review materials currently taught in Basic Algebra IV and Algebra for Calculus. The outcomes of Algebra for Calculus Stretch I and II include all outcomes of Algebra for Calculus, so Algebra for Calculus Stretch II and Algebra for Calculus should be considered as satisfying equivalent student requirements and prerequisites.

Algebra for Calculus Stretch I and II each contain a significant portion of non-remedial content, so can be viewed as college level for the purposes of the remediation free standards. We ask for temporary Kent Core status for Algebra for Calculus Stretch II only.

I am attaching syllabi for the proposed new courses and a document explaining necessary new placement protocols.

Andrew Tonge, Chair, Math.