

**MEMO**  
March 29, 2002

To: Curriculum Committee  
From: NSM Division  
Re: Restructuring the Developmental Math Curriculum

**Background**

A large number of I.U. East students need additional preparation before enrolling in the college math course(s) required for their degree program. Currently 97% of incoming students are placed into developmental math. To meet this need I.U. East has traditionally offered several levels of developmental math courses. These courses generate a substantial number of student credit hours (1929 cr. hr. in fall 2001). The creation of the Community College system has altered our role with regard to remediation. Recently, math faculty from all the I.U. campuses met to discuss these and other aspects of the math curriculum on all campuses. To comply with the agreement between Indiana and Purdue Universities and the Commission on higher education the NSM Division proposes the following changes to the I.U. East developmental mathematics curriculum which parallel recent changes made to the developmental English curriculum:

**Proposal**

- Continue offering M006 and M007
- Cease offering M014 after fall 2002
- Begin offering M117 spring 2003

**Course Description for M117, Intermediate Algebra.**

M117, Intermediate Algebra, is taken from the master course list. It is currently offered on the Kokomo and Southeast campuses in place of M014. Northwest is also in the process of implementing this change.

MATH M117 Intermediate Algebra 3 credits

P: Appropriate placement on skills review or M007. Factoring, rational expressions, fractional exponents, radicals, quadratic equations, linear and quadratic functions and linear systems. Not distribution satisfying.

**Rationale for M117**

This course will eliminate some of the topics from M014 and focus more on the math skills needed for future math study. This should better prepare students for subsequent courses and increase student persistence in college. It parallels recent changes in the developmental English curriculum on this campus and conforms to changes made recently on other regional campuses. M117 would become the prerequisite of choice for M125 and M118, (M014 remains an alternate prerequisite). M117 is a 3 credit hour course and would also eliminate some awkward scheduling issues created by the 4 credits of M014.

**MEMO**

March 29, 2002

To: Curriculum Committee  
 From: NSM Division  
 Re: New prerequisite for M119, Brief Survey of Calculus

**Rationale for Changing the prerequisite for MATH M119, Brief Survey of Calculus**

Although the Master Course List indicates that M014 is the prerequisite for M119, math instructors have been aware for some time that M014 does not provide adequate preparation. Students lack practice in algebraic skills and have not covered some of the pre-calculus concepts needed. As a result they struggle with the calculus concepts. For example, in fall 2000 the DWF rate was 40%. NSM Math faculty recently developed a list of skills needed for M119 and compared them with the topics covered in M014 and M125. It was clear that M014 does not provide adequate preparation for calculus. When checking current catalogs and in conversations at the recent math articulation meeting, we learned that Kokomo, Southeast, and South Bend campuses require an additional algebra course, usually M125, as a prerequisite for M119. (Fort Wayne and IUPUI use Purdue courses) We propose that I.U. East conform our curriculum to that of the above regional campuses beginning spring 2003.

**Proposal**

- Redescribe M119 to use M125 as a prerequisite effective spring 2003

We are aware that changing the prerequisite for M119 will add credit hours to the mathematics sequence for some majors. But we believe that this will lower the DWF rate and it is in the best long-term interest of the students. Coupled with the change from M014 to M117, this will actually add only 2 credits.

