Planning and Evaluation Tracking

College Year: **2009-2010**

Division of: Sciences and Engineering **Person Responsible: Jack Stanley**

Department of: Mathematics and Engineering **Person Responsible: Kathryn Wetzel**

Purpose Statement: The Mathematics and Engineering Department supports the goals of the Science and Engineering Division by providing educational opportunities for improvement in foundational mathematics skills and for success in transfer-level math and engineering courses required in a broad spectrum of technical fields and advanced degrees.

Goal Statements	Objectives/Outcomes (including assessment tools and standards)	Results	Use of Results (including improvements and revisions)
1. Prepare developmental students for their next level mathematics course.	1. Upon successful completion of MATH 0302 (Beginning Algebra) with a grade of A-C at least 60% of developmental students will score a minimum of 63 on the Accuplacer Test which is the required score for students who place directly into the next course MATH 0303 (Intermediate Algebra).	1. Results are as follows: 2008 SP 60.7% pass 2008 SU 57.9% pass 2008 FA 59.6% pass 2009 SP 63.4% pass 2009 SU 60.6% pass	1.Analysis The pass rate fluctuates and though it does not drop below 57%, it does not maintain our goal of 60%. Action Plan These results will be distributed to all MATH 0302 teachers. The Math 1314 teachers wil meet at the beginning of the semester to discuss these results and plan specific techniques and interventions as a plan of action to increase the students' proficiencies. We will continue the assessment process to monitor changes in performance.

2. Provide courses encompassing required math skills/knowledge to enable students to transfer and/or complete a degree or certificate program.	2. a. 50% of students in MATH 1314 (College Algebra) taking a chapter test covering one of the topics identified by the faculty for assessment (solving a quadratic equation using the quadratic formula, finding the domain of a function, solving an exponential equation, solving a logarithmic equation, and analyzing a rational function) will score at the proficient level receiving a 4 or 5 on a 5 point rubric scale.	2.a. Radical Function Domain Traditional: 2008 FA 48% proficient 2009 SP 38% proficient Online Dual Credit: 2008 FA 41% proficient (Online not taught in Spring) Graph a Rational Function Traditional: 2008 FA 60% proficient 2009 SP 63% proficient Online Dual Credit: 2008 FA 83% proficient (Online not taught in Spring) Solve an Exponential Equation Traditional: 2008 FA 51% proficient 2009 SP 52% proficient Online Dual Credit: 2008 FA 73% proficient (Online not taught in Spring) Solve a Logarithmic Equation Traditional: 2008 FA 36% proficient 2009 SP 47% proficient Online Dual Credit 2008 FA 56% proficient (Online not taught in Spring)	2.a. Analysis In general, we are not meeting our goal, with the exception of graphing a rational function in traditional and online classes and solving an exponential function in the online classes. Action Plan These results will be distributed to all instructors of Math 1314. The Math 1314 teachers wil meet at the beginning of the semester to discuss these results and plan specific techniques and interventions as a plan of action to increase the students' proficiencies. We will continue the assessment process to monitor changes in performance.

3. Provide opportunities to students to analyze problems and apply mathematical principles to solve and effectively communicate results.	3. Beginning Fall 2009, upon completion of Math 1316, 60% of students taking a comprehensive final will successfully solve a word problem as evaluated by the faculty based on a predetermined rubric.	3.	3.
4.	4.	4.	4.
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6.	6.	6.	6.

7.	7.	7.	7.

revised 8/1/05