

Math Department Meeting
Wednesday, March 2, 2005

Programs within our department

- I. Basic Skills: 811, 110, 111, 112, 120, 122, 123, 115
- II. College Level General Education: 125, 130, 140, 150, 200, 241, 242
- III. College Level Math / Science Majors: 219, 251, 252, 253, 268, 270, 275

Goals:

For each of these program can we write a statement or two that encompasses what we want students to get out of it? A question that might prompt this discussion may be, "if you were to convince a student or parent about why they should be in this program, what can you say to them?"

Outcomes:

On a very specific level, we actually need to come up with 2-5 outcomes (relating to the objectives) on what we expect students to be able to do, and in what conditions, when they get through our program.

Further explorations:

- Reaching other faculty for agreement (consensus or compromise).
- In which courses are the program outcomes satisfied? (matrix)
- Developing goals, objectives, and outcomes for each individual course.
- Incorporating these ideas in Program Review.
- Continued conversations.

Program: **Math: College Level Math / Physical Science Majors**

Courses: **Math 219, 251, 252, 253, 270, 275, 268**

Goals/Mission

The Mathematics Department offers a wide variety of courses for students who wish to major in mathematics, science, and engineering. The mathematics and science majors program provides opportunities for mathematical growth and lays the foundation for the challenges of upper-division mathematical and science courses in four year institutions.

Learning Outcomes

Knowledge and concepts students will have as a result of this program.	① Define and use functions in many aspects for modeling.
Skills or performance ability as a result of this program.	② Be able to apply advanced mathematical concepts to problems in mathematics and computer science, and life and physical sciences. ③ Think critically about problem-solving strategies.
Attitudes of values developed as a result of this program.	④ Increase confidence and maturity in mathematics. <i>Express</i> <i>how to measure?</i> <i>higher level of abstraction</i>

Alignment Matrix

Course	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	
219	I	P	I	I		
251	P	P	P	P		
252	P	P	D	P		
253	D	P	D	P		
268			D			
270			D			
275		D	D			

Discr.
Lin Alg
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I = Outcome is introduced

P = Outcome is practiced with feedback

D = Outcome is demonstrated at the mastery level

D I I
D I D I I
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