# **EXPECTATIONS AND SUGGESTIONS**

## STUDENTS SHOULD SPEND A <u>MINIMUM</u> OF 10 HOURS OF COURSE WORK <u>OUTSIDE OF CLASS</u> PER WEEK

### 5 CREDITS IS ABOUT 1/3 OF YOUR SEMESTER'S COURSE WORK, WE EXPECT 5 CREDITS WORTH OF EFFORT.

#### YOU MUST DEVELOP CONSISTENT SELF-DISCIPLINE.

- **\*\*Quizzes and Exams** will emphasize the concepts and types of problems done in lectures as well as the material and concepts found in the homework problems. Be in the habit of coming to lecture every time. If you miss lectures you will miss concepts and types of problems that will appear on exams and quizzes. Again, consistent self-discipline is required.
- **Quizzes** are worth 125 points at the end of the semester, which is more than the equivalent of a midterm exam, so coming to the TuTh recitations regularly is also very important.

## Use the Math 205 Help Room(in MATH 205). It is open: Monday through Thursday from 10:30 until 5:30 Friday from 10:30 until 2:30

WEB PAGE: ...math.purdue.edu/MA15900 or go to www.math.purdue.edu and then click on 'Course Pages' on the right side of the page and then click 'MA 15900'. Fear is the mind-killer. I must not fear. Fear is the mindkiller. Fear is the little death that brings total obliteration. I will face my fear. I will permit it to pass over me and through me. And when it has gone past I will turn the inner eye to see its path. Where the fear has gone there will be nothing. Only I will remain.

--- Frank Herbert

# SOME WARNING SIGNS OF POTENTIAL DIFFICULTY:

You did not take a strong, rigorous math course your senior year.
Low ALEKS score of around 50 or less.

3) You are not self-motivated.

4) Quizzes – scoring way below average (less than 5 out of 20 points) on the first few quizzes is another possible indicator that you may be in the wrong course.

"SAFETY NET " – MA15300 – If you need an easier course... Be aware that MA15300 exists, but also note there is no rush to make a decision. Waiting until shortly after Exam 1 works fine for most students. If you do choose to drop back to MA 15300, which leads into MA 15400, they use the same textbook, but move through the material more slowly and the difficulty level of the exams is slightly less than for MA 15900. It is definitely not as rigorous a preparation for calculus courses, especially MA16100.

### **OVERCONFIDENCE**

Some students are actually angry that they are being asked to take an Algebra and Trigonometry Course.

For most of you, your education has been unknowingly a mile wide and an inch deep. Be careful about assuming you already know this material.

NOTE: Even if you have "taken" an AP Calculus course.

# **CHALLENGES**

MA 15900 is designed specifically to prepare Engineering and Science students for the MA 16100, MA 16200, MA 26100, etc. series of Calculus courses they will need to be successful in. Therefore, this means that an understandably high level of performance is expected in this course. Students who are successful in this course have proven to be very well prepared for Purdue Calculus courses.

Overcoming dependence on calculators and graphing calculators. **NO CALCULATORS ON QUIZZES OR EXAMS UNTIL AFTER EXAM 2, and after Exam 2 only a basic scientific calculator** – Why? ...because MA 16100, MA 16200, and MA 26100 do not allow any calculators on their quizzes or exams. Therefore you must be able to do 5th grade arithmetic without a calculator. For example, adding and dividing fractions must be done frequently. These methods will be used with more abstract algebraic expressions as well. Many of you are so calculator dependent, you will struggle with this at first. We will obviously not be able to spend lecture time showing more than very brief reminders of 5th grade arithmetic.

The other main difficulty of not having a calculator, and that you must be able to do well for calculus, is **graphing any equation or function without a graphing calculator.** We will spend a lot of time on graphing equations and functions in lectures when we get to Chapter 3 and beyond. These graphing problems will begin during the fifth week of classes, shortly after Exam 1.