# Math 112: Calculus II
## Syllabus, Fall 2013

Professor: **Dr. Jason Parsley**
Office: 330 Manchester Hall
Office hours: M 2:30-3:30, Tu 10-11, 3-4*, F 2-3, also by appointment
     (* – preference to math 112 students)
Email: `parslerj AT wfu.edu`

**1. Course Time & Location:** MTuWF 11 (`112B`) and 12 (`112C`), Manchester 020

**2. Text:** Stewart, *Single Variable Caculus*, 7th ed., chapters 4, 5, 6, 7, 8.4, 11

**3. Course theme:** This course covers the standard second-semester calculus topics: integration techniques, exponential and logarithmic functions, sequences and series. As part of an initiative across campus, The Magnolias Curriculum Project, our course will have a *mathematics and sustainability* theme. We will study the notion of environmental sustainability via homework exercise, readings, projects, and discussions.

**4. Course software:** We will use `Sakai` for course content, grades, etc. All students must buy a `WebAssign` license – this is our online homework system; to signup you need the following key: `wfu 3283 3469` . We will utilize `Maple`, a symbolic computational software.

**5. Homework:** Homework comes in two flavors in this course. There will be WebAssign problems most days, due by **noon** the next day.

There will also be written problems due at the start of class on Wednesdays. **No late work will be accepted** without prior approval. Three of these will be designated as 'Quiz problems' ... one of the three will form our weekly quiz on Monday; this is my way of forcing you to get started early. The written homework should be neatly written using proper English grammar. We will grade typically three problems per week from these written problems, worth 5 points each; problems which are ungraded are checked for 'completeness' – whether you have made an honest attempt. Most written assignments are worth 25 points.

Each assignment will include one or more 'Challenge problems'. These are optional. Solving one will earn you one or more gold star(s). However, to receive an A in the course, you must solve at least two of these correctly in the semester, submitted by **Monday, Nov. 25**.

Academic integrity is something I take quite seriously. Here are my expectations: you may discuss course material freely with each other. The WebAssign and written assignments that you submit must be your original work, i.e., when writing your solutions, you should be working independently, not together.

**6. Quizzes:** We will have a weekly quiz at the start of class on Mondays. It will be drawn from one of the three 'Quiz problems' on the homework, possibly with constants changed. **There will be no makeup quizzes.** These points count in your homework average; we will drop your lowest quiz score.

**7. Projects:** Technical writing is one of the most useful skills for those in the academic, scientific or business professions, but it is one often neglected at the undergraduate level. Three written projects are required for this course. Some will be written individually; some will be completed in small groups (usually 2-3 students). Some of the projects will require using the software Maple; it may prove useful for all of them.

|           | Assigned by | Due   |
|-----------|-------------|-------|
| Project 1 | 8/28        | 9/10  |
| Project 2 | 9/30        | 10/9  |
| Project 3 | 11/6        | 11/15 |

**8. Exams:** There will be three midterm exams and a cumulative final exam. If you miss an exam without my prior approval, it will count as a 0.

- 1st midterm: **F., Sept. 27**

- 2nd midterm: **F., Oct. 25**

- 3rd midterm: **Tu., Nov. 26**

- Final Exam: **W., Dec. 11, 9am - noon**

The top five students across both sections (not counting any extra credit) will be exempted from taking the final exam.

**9. Fun Facts:** Each Tuesday and Friday, we will present a morsel from the broader world of mathematics.

**10. Help:** The first place to start is by attending my office hours. We will utilize a Google Doc for homework discussion, where your classmates and I will respond to questions. There are also 112 study sessions held most weeknights, 7-9pm.

The Math Center at Wake Forest is available to help you with calculus. They will not help you with any written homework questions, except for the 'Quiz problems', whereas I am willing to discuss all homework questions in my office hours. The Math Center will explain concepts, work similar problems with you, and answer any questions you have.

**11. Grade Calculation:**

| Homework      | 24%      |
|---------------|----------|
| Projects      | 10%      |
| Participation | 5%       |
| Midterm Exams | 12% each |
| Final Exam    | 25%      |

**12. Gold Stars:** Throughout the semester, I will award 'gold stars' to recognize achievements. These function as extra credit; the current exchange rate, which may fluctuate, is roughly

$$\texttt{20 gold stars} \approx \texttt{1.00 point on your final average.}$$

You may earn these for things like solving challenge problems, finding errors in the text, saying particularly insightful comments in class or on homework discussion, and otherwise stellar behavior. I reserve the right to award these in many different, unspecified ways.

There is only one way that you can lose stars – technology violations. If your cellphone rings during class or you are using your laptop or other device during class, kiss one of your stars goodbye. (Being a mathematician, I believe in the existence of negative numbers and know how to use them.)

If you have a disability which may require an accommodation for taking this course, please contact the Learning Assistance Center (758 5929), then contact me, within the first 2 weeks of the semester.