Math 118, Section Spring, 2011 (January, 2011)

Instructor: David White Office: Exley 630-B

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Office Hours: Tuesday 11-12

Thursday 1-2 By Appointment

Course meets: M.W.F. 10:00-10:50, Exley 139

For this course you will need the text book Calculus by Deborah Hughes-Hallett, Andrew Gleason, et al, 5th Ed. and a graphing calculator such as a TI-82 or TI-83. Other graphing calculators may be acceptable, but you should speak with me to be sure. Bring both your textbook and your graphing calculator to every class since we will be using them often.

Math 118 is a continuation of Math 117, given in the Fall semester. While it is not necessary that you have taken Math 117 in order to enroll in Math 118, you will be expected to be proficient in the material covered in Math 117. The same text was used for that course as we are using so if you were not enrolled in Math 117 last Fall, you should review chapters 1, 2, 3 and 4 to familiarize yourself with the text's approach.

The format of Math 118 will resemble that of the first semester of the course. Traditional fifty minute lectures will occasionally be replaced by brief discussions that highlight themes and examples from previously assigned readings. A portion of class time may be devoted to small groups working on problems.

The textbook selected for this course was chosen because it has proven particularly successful when used in a format such as the one outlined above. The text uses practical examples from the physical and social sciences to illustrate the major concepts of calculus. Since you will be responsible for much of your own learning in this course it is imperative that you read the text. The assigned readings will be short but you must spend time studying them. Much of what you will be doing in this course will be learning how to solve problems. To this end the text stresses conceptual understanding over memorization and creative approaches to the techniques of calculus over drill. Our work in and out of class will reflect this. For this reason also graphing calculators will be used at every opportunity to avoid numbing calculations and to aid in visualizing, where possible, the fundamental ideas of the course.

Grading: Your grade in the course will be computed according to the following:

20%: Exam I

20%: Exam II

20%: Final Exam

15%: Quizzes

15%: Individual Homework

10%: Participation

In addition you must pass a skills test in order to pass this course.

<u>Exams</u>: There will be three examinations (in addition to the "Skills Test", for which see below). As indicated these will be equally weighted. One will be the Final Exam. The other two will be approximately 1/3, respectively 2/3, of the way through the course.

Quizzes: The session on Monday from 12:00-12:50 in SCIE 638 will be devoted to a question and answer period followed by a short quiz. The question and answer period will provide a review of the previous week's work—the concepts introduced along with any applications developed—and is intended to allow you to check on your understanding of the material. The quiz will also be based on the work of the previous week and is meant to monitor progress so that any difficulties or misconceptions may be uncovered and corrected quickly. Attendance at these sessions is part of the course. There will be **no make-up quizzes** for any who miss a session. However, as with the Homework, you will be allowed to drop the lowest two quiz scores in computing your quiz grade.

<u>Individual Homework</u>: Weekly homework assignments will be assigned on Friday, sometimes with an addendum on Monday, and will be due in class the following Friday. You are welcome to seek help on the individual homework assignments from other students, the Math Workshop, TA's and your instructor. However, you should write up your own homework yourself, and it should be well written and readable. A list of "Answers" without supporting documentation is normally unacceptable. In other words, show your work. While late homework will not be accepted, you are allowed to drop your two lowest homework scores.

We will arrange for weekly TA sessions which you are encouraged to attend if you have difficulty working the week's assignment. Of course you are also encouraged to consult with your instructor if you encounter difficulties or obscurities, or just to chat if you like.

<u>Participation</u>: We encourage you to participate actively as a member of the class through any comments on the material as it is developed and, especially, in bringing to light any difficulties or obscurities that you might encounter. If something seems unclear to you the chances are very good that others are also unsure of what is going on and we will all be grateful if you bring such things to our attention. Class attendance is essential in this regard and will be a significant factor in determining your participation grade.

<u>Skills Test</u>: After Section 3 of Chapter 7 has been covered in class, you will be prepared to take the Skills Test. This test is intended to confirm that you have learned some important techniques of integration. The test will be administered first on the Monday following Spring break (March 21). Attendance is mandatory. If further attempts are necessary, tests will be available for you to take on your own time. You will be allowed to take the Skills Test as many times as necessary in order to pass it, but you must have passed the test prior to the last week of classes. Each time you take the exam you will be given a different (but comparable) version of the test.

<u>Math Workshop</u>: You are encouraged to make use of the Math Workshop, a free tutoring lab provided by the Mathematics Department. Located in Room 127 of the Science Center, the workshop is open weekly afternoons and Sunday through Thursday nights. In the Workshop you will be able to work one-on-one with advanced mathematics students and graduate students.

<u>Moodle</u>: There is a course Moodle where you can find electronic copies of handouts, homework, assigned readings, and some homework solutions. You will also be able to view your grades here. The URL is https://moodle.wesleyan.edu

<u>TA Schedule</u>: All TA sessions will be held from 7-9 PM in Exley 618. There are three TAs and any student may go to any TA session.

Sunday night – David Puelz Wednesday night – Sam Masur Thursday night – Jae Cha