

SYLLABUS
TRANSITIONS: MATH 299, SECTION 1

FALL 2014

Instructor's Name: David Duncan

Instructor's Email: duncan42[at]math.msu.edu

Instructor's Office: Wells Hall C-315

Office Hours: Mon, Wed: 9 am-10 am; Mon: 2 pm-3 pm; additional office hours available by appointment

TA's Name: Kellie Stilson

Lecture Times and Location: M, W, F 10:20-11:10, Wells Hall A-301

Recitation Time and Location: Th 10:20-11:10, Giltner Hall 275

Course Webpage: math.msu.edu/~duncan42/Fall14Math299.html

Textbook: Chartrand, Polimeni, Zhang. *Mathematical Proofs: A Transition to Advanced Mathematics*. (3rd Edition)¹ ISBN 0321797094

Objectives: The primary goal of this course is to learn to read and write mathematics. In particular, this means the course will have a heavy emphasis on writing proofs. A passing grade in this course indicates that a student should be able to read and write mathematics at a level necessary for more advanced courses in mathematics. In addition to various proof-writing strategies, we will also discuss the basics of logic, set theory, number theory and real analysis. You are expected to learn this material as well; however, at each stage, the focus will be on understanding and writing *proofs*.

Homework: Each day, in class, I will tell you which homework problems will be due the following class day. I will also post this information on the course webpage. Unless otherwise specified, homework will be due each day at the beginning of class. If you are ever unsure which problems are due, please ask me. It is your responsibility to turn in the correct assignment at the correct time. I will drop the lowest two homework scores when computing your final grade. **Late work will not be accepted.** Homework help is available during my office hours, during recitation, and at specified hours in the Math Learning Center.

¹The second edition is also fine, but talk to me if you plan to use it (the problem sets are different).

Quizzes: Quizzes will be given every Thursday during the recitation. Your performance on the quizzes will be a good indication of your standing in the class. I will drop the lowest quiz score when computing your final grade.

Exams: There will be two midterm exams and one final exam for this course.

Midterm 1: Thursday, October 2;

Midterm 2: Thursday, November 13;

Final: Wednesday, December 10, 3:00 pm - 5:00 pm.

The midterms exams will be given during recitation. The final exam will be a group exam (i.e., the same exam taken by all seven sections of this course). I will let you know when we have finalized a location for the final exam.

Final Grades: Here is the breakdown of how your final grade will be computed:

Homework	25 %
Quizzes	15 %
Midterm 1	15 %
Midterm 2	15 %
Final	30 %

Here is a tentative grade scale:

$$\begin{array}{lll} 90 - 100\% = 4.0; & 80 - 84\% = 3.0; & 70 - 74\% = 2.0 \\ 85 - 89\% = 3.5; & 75 - 79\% = 2.5; & 60 - 69\% = 1.0 \end{array}$$

If the situation warrants, I retain the right of assigning grades higher than would otherwise result from the scale above.

Tips for Success: Your attendance and participation in lecture and recitation are crucial to your success. However, successful completion of the homework is equally important. If you can do all the homework problems comfortably (and correctly), you are almost certain of a good grade. If you neglect the homework, there is very little which can earn you more than a passing grade. Simply memorizing what is covered in lecture, recitation, etc. will not be of much help — you must do math to learn math.

Cheating, plagiarism, and their cousins will not be tolerated. For more information about this and other scholarship issues, please consult the handbook or visit the Spartan Life websites at

- <http://www.vps.msu.edu/splife/reg3.htm>
- <http://www.vps.msu.edu/splife/rule32.htm>

Also, please turn your cell phones off, or put them on silent mode during class.

Mathematics Learning Center (MLC): The MLC provides free assistance for students in Math 1825 and all 100, 200-level courses, as well as limited help for 300-level classes. Students wanting help at the Wells Hall MLC should go to the first floor of the C-wing of Wells Hall across from the elevators where a student monitor at the lobby window will direct them to the appropriate room for help. In addition, there are neighborhood MLCs with help available Monday through Thursday evenings. The MLC has an excellent reputation for providing

professional, friendly assistance to students. I strongly urge you to use their services. The MLC hours are extensive and will be posted at the center; also see <http://www.math.msu.edu/~mlc/>.

Finally, here are some important dates:

- 08/27/2014 (Wednesday): Classes Begin. Students should go to scheduled *Monday* classes on the first day.
- 09/01/2014 (Monday): Labor Day; University closed.
- 09/03/2014 (Wednesday): Online open add period for fall semester ends at 8pm.
- 09/04/2014 (Thursday) to 09/10/2014 (Wednesday): Students should go to Undergraduate office, C212 Wells Hall for Mathematics enrollment changes (e.g., late adds, drops to lower course, section changes).
- 09/22/2014 (Monday): End of 100% tuition refund
- 10/15/2014 (Wednesday): Last day to drop a course without a grade being reported.
- 11/27/2014 (Thursday) to 11/28/2014 (Friday): Thanksgiving Break.
- 12/5/2014 (Friday): Last day of classes.