Instructor: Daniel Durusoy
Lectures: 1235 Anthony Hall on Mon, Wed, Fri 10:20 – 11:10
Office hours: Mon 1–2pm, Tue 9–10am, Wed 2–3pm and by appointment
Email: durusoyd@math.msu.edu (include 299 in the subject of email)
Website: http://www.math.msu.edu/~durusoyd/m299
Recitation instructor: Keaton Quinn
Recitation: 275 Giltner Hall on Thu 10:20 – 11:40
MLC hours:

Textbook: Kevin Houston, How to Think Like a Mathematician, Cambridge Univ. Press (2009)
We will use this textbook for reading as well as problems for homework. We will also be incorpo-
rating The Art of Proof by Matthias Beck which is available online through MSU library.

Course description: This course gives an introduction to mathematical reasoning, basic logic,
set theory, integers, natural numbers and induction, basic number theory, real numbers, limits,
sequences, series. At the end of the semester the student should be able to

1. Verify if a mathematical statement is written clearly
2. Read definitions, theorems, proofs critically
3. Understand mathematical notation and statements of theorems
4. State clear definitions and statements
5. Make and disprove conjectures related to a given theorem
6. Verify if a proof is valid, improve a poorly written proof
7. Generate proofs for statements related to sets, functions, arithmetic, limits.

This is a uniform course in the sense that different instructors are going to teach similar topics and
we will have a common final exam. On the other hand each instructor has a different teaching style
and we will do things a little differently.

Grading: There will be two midterms (October 3rd, November 7th), a common final exam (De-
cember 9th), 12 quizzes (counting the best 10 scores) and regular homework. Late homework will
receive less than full points. The grading scale will be

\[ \geq 90\% = 4.0, \geq 85\% = 3.5, \geq 80\% = 3.0, \geq 75\% = 2.5, \geq 70\% = 2.0, \geq 60\% = 1.0 \]

based on daily homework consisting of 25%, weekly recitation quizzes 20%, midterm exams 15%
each, final exam 25%. Note that there are no make-ups for any assignment except for exceptional
situations, documented as soon as possible.

Homework: Homework will be regularly collected at the beginning of class. Late homework will
not receive full credit. You may discuss any of the problems with each other or ask for direction at
MLC, as long as you write your own solution in your own words.

Other important dates:
Monday 09/02/2013 Labor Day University closed
Wednesday 09/04/2013 Online open add period for fall semester ends at 8pm.
Thursday 09/05/2013 to Wednesday 09/11/2013 Students go to Undergraduate office, C212 Wells
Hall for Mathematics enrollment changes. (Late adds, drop to lower course, section changes)
Wednesday 09/11/2013 Last day to late add a course or change sections within a course.
Monday 09/23/2013 End of 100% Tuition Refund
Wednesday 10/16/2013 Last day to drop a course without a grade being reported.
Thursday 11/28/2013 to Friday 11/29/2013 Thanksgiving Break
Friday 12/6/2013 Last day of classes.