Math 3034 - Introduction to Proofs - Fall 2015
(CRN 84559)
MWF 12:20-1:10pm Pamplin 1001

Instructor: Dr. Rachel Arnold
Office: 545 McBryde Hall
Office Hours: MWF 8:45-9:45am
TR 2:45-3:45pm
- Other hours by appointment
- In addition to help during office hours, you may hire a private tutor by sending an email to math_tutors-g@vt.edu indicating your specific needs.

Phone: (540) 231-8271
Email: rachel.arnold@vt.edu


Prerequisite: (Obtain a C or at most one C- and a QCA of at least 2.2 in Math 1205, 1206, 1114, 1224, and either 2214 or 2224) OR (obtain a C or better in the final attempt of each of 1225, 1226, 1114 and (2204 or 2214)) OR (obtain a C or better in the final attempt of Math 2114)

Course Description and Objectives: This course will provide the student with the background necessary to begin formulating and communicating mathematical proofs. The material will include a brief introduction to logic, various proof techniques, set theory, mathematical induction, equivalence relations, and mappings. For math majors, this course meets the requirements for an in-major writing intensive course.

Scholar: The course contract, syllabus, and other materials essential to this course can be found on our class Scholar site. You are responsible for all announcements made on Scholar.

Grading: Your final grade in the course is based on the following work.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>30%</td>
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<tr>
<td>In-Class Tests (2)</td>
<td>44% (22% each)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>26%</td>
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A 90% will guarantee an A-, 80% a B-, 70% a C-, and a 60% a D-.

Grading Appeals: Specific grading disputes (points totaled incorrectly, partial credit appeals, missing assignments on Scholar, etc) should be brought to my attention within 1 week of return of the assignment. Appeals outside of this timeframe will not be considered.

Assignments: Homework assignments will be announced regularly on Scholar. If you miss a class, you are responsible for any announcements or assignment changes made, whether they are posted online or not. Assignments will be collected at the beginning of class and will be considered late if turned in after it is collected. You are encouraged to work together on homework assignments, however your final write-up must be done independently.

Late Assignment Policy: You may, during the course of the semester, submit at most two late assignments for full credit provided they are turned in by the beginning of the next class meeting immediately following the due date. This policy will be followed uniformly and strictly regardless of the reason for the assignment being late. I will drop your lowest two assignment scores.
**Exams:** There will be two tests and a comprehensive final exam. Exams must be taken on the specified date. Usually, makeup exams will not be given. If a student misses an exam for reasons that are serious, unavoidable, and beyond the student’s control, the situation will be handled on an individual basis. When possible, the student should notify me before missing the work. If it is to your benefit, your grade on the final exam will replace your lowest test grade.

The final exam is a required class meeting that will not be rescheduled for discretionary reasons, including conflicts with work schedules, conflicts with classes and exams at other colleges, and travel plans. Below are tentative test dates. The final exam date is fixed.

- **Test 1**  
  Week of September 28
- **Test 2**  
  Week of November 2
- **Final Exam**  
  Thursday, December 17, 10:05am - 12:05pm

**Honor System:** All assignments, tests, and quizzes submitted will be considered graded work and must be completed on an individual basis. Homework may be discussed with other students as well as with the instructor. However, in writing up an assignment to be handed in, each student works alone (without other students or other students’ papers) and certifies that what is written accurately represents the student’s own understanding of the material expressed in the student’s own words. In working, or in preparing to work, homework problems, students may not consult partial or complete solutions of the problems that have been prepared by anyone else. The prohibited solutions include, but are not limited to, solutions by current or former teachers or students at VT or elsewhere, whether these solutions are posted on the web or available from other sources. The honor code applies to all graded work in this course. If you have any questions about how the honor code applies to a particular situation, it is your responsibility to ask.

**Classroom Courtesy:** You and your classmates are entitled to learn in an atmosphere of mutual respect, and freedom from distractions and disturbances. The following guidelines are in effect for this class.

- Students are expected to arrive on time and stay until class is dismissed.
- If you know ahead of time that you will be late or must leave early, please let me know in advance, sit as near the exit as possible, and enter or leave quietly.
- Talking to classmates during class, aside from group assignments, is disruptive to those around you and will not be tolerated.
- Laptops used as a tablet PC are permitted provided they are used in the flat, tablet position. Open laptops are not allowed.
- Cell phones must be silent or turned off. That goes for anything else electronic that makes noise.

**Attendance:** Class attendance will be taken daily and kept for Mathematics Department records. Students are responsible for course materials and announcements covered in class.

**Disability Statement:** If you need adaptations or accommodations because of a documented disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible.

**Caution:** If you are not on the class roll that comes out after the last ?add? date, you are not in the class. It is your responsibility to make sure you are attending the proper section. For no foreseeable reason (computer and/or registrar personnel mistakes included) will you be allowed to stay in the wrong section. Your work will not be graded. Simply attending a section will NOT entitle you to be placed on its roll.