MATH 201-01: Transition to Advanced Mathematics

CRN: 29229
Instructor: R. Patrick Vernon
Class Times: MWF 10:00am - 10:50am
Class Location: Buckman 214
Office Hours: MWF 12:00pm-1:00pm
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URL: http://faculty.rhodes.edu/vernonp/

Description
In this course, students will familiarize themselves with the concepts of constructing proofs. This course will differ from lower level mathematical courses in the sense that it will rarely involve computational mathematics (eg, differentiation or integration) and will mostly involve proof-based mathematics. I plan on covering the entire text. Depending on time constraints, I may omit sections or have you read sections on your own.

Calculators
A calculator is not necessary for this course and will most likely not benefit you in the course. However, you may continue to use one unless I instruct otherwise.

Grades
Assignments will be graded as soon as possible, and grades will be made accessible to students. Each student’s final grade will be based on the following percentages:

- Quiz Average: 10%
- 3 Tests: 18% each
- Homework: 8%
- Reports: 8% total
- Final Exam: 20%

Your final numerical grade will be rounded to the nearest whole number and your letter grade will be given by the following chart:

<table>
<thead>
<tr>
<th>Numerical Grade</th>
<th>F</th>
<th>D-</th>
<th>D</th>
<th>D+</th>
<th>C-</th>
<th>C</th>
<th>C+</th>
<th>B-</th>
<th>B</th>
<th>B+</th>
<th>A-</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-59</td>
<td>F</td>
<td>D-</td>
<td>D</td>
<td>D+</td>
<td>C-</td>
<td>C</td>
<td>C+</td>
<td>B-</td>
<td>B</td>
<td>B+</td>
<td>A-</td>
<td>A</td>
</tr>
</tbody>
</table>

Attendance
I will take attendance at the beginning of each class for my own records. Attendance is not directly calculated into your overall grade. However, students are expected to know all material covered during lecture, even if it is not covered in the textbook. If you are unable to attend a class session, let me know beforehand. If you
are absent for a quiz, be prepared to bring a doctor’s note in order to take a makeup quiz. If attendance is particularly low on a given day, I reserve the right to give a pop quiz.

We will discuss the features that make for good mathematical writing. You will learn a bit about \TeX, a free typesetting tool used by most mathematicians.

**Homework**

Homework problems will be assigned roughly every day and collected every Monday. Additionally, I will have students present selected problems at the board.

**Tests and Final Exam**

Each test will consist of all material covered since the previous test. The tests will be the same format as the quizzes, though longer and more detailed. The Final Exam will be comprehensive, but with more emphasis on material covered after the third test.

**Grading**

Full credit will be awarded when you show all work, with clear reasoning, and when I can read and understand what you have written. Writing is an important component of this class. Your grade will suffer if you include extraneous material, use poor grammar, or if your work is so messy or disorganized that I am unable to follow it.

**Assistance**

I am available during my office hours to answer any questions you may have. You are more than welcome to stop by my office during these hours without prior notice, but I can ensure less time conflicts if you notify me via email in advance. If you are unable to meet with me during my office hours, please let me know and we can set up a time which is appropriate for both of us.

In addition, the Math Support Center provides a tutor for this course, whom you can contact to set up an appointment. If you are having any problems, I highly recommend seeking assistance early, before your difficulties become insurmountable.

**This Syllabus**

I will attempt to adhere to the syllabus as closely as possible. However, the syllabus is subject to change, and the most recent copy may be found online at my Rhodes webpage: [http://faculty.rhodes.edu/vernonp/](http://faculty.rhodes.edu/vernonp/)

I will make every effort to notify students of any significant changes to the syllabus.

**The Honor Code**

I take the Rhodes Honor Code seriously, and it is diligently enforced in my classes. All graded work must comply with the Rhodes Honor Code. If the Honor Council finds that a student has committed an Honor Code violation in my class, the student will receive no credit for that assignment. I reserve the right to fail anyone convicted of an honor code violation by the Honor Council.