Math 210 - Course Syllabus
Discrete Math
TTh 9:30-10:45am
Congdon Hall 128

Course Description
Math 210: An introduction to mathematical proof. Topics to include elementary symbolic logic, mathematical induction, algebra of sets, finite probability, relations, functions, and countability.

Basic Information
Instructor     Dr. Jenny G. Fuselier
Office         153 Congdon Hall
Phone          (336) 841-9342
E-mail         jfuselie@highpoint.edu
Web Page       http://math.highpoint.edu/~jfuselie
Office Hours   MW 8:30-9:30am, TTh 11:00am-12:30pm, or by appointment
Required Textbook Mathematical Reasoning: Writing and Proof, 2nd Ed., by Sundstrom

Course Philosophy
This course is intended to be a first course in theoretical mathematics. While we will study a variety of topics (such as logic, set theory, and functions), the central theme of the course is proof writing. We will see how to construct direct proofs, indirect proofs, and proofs by induction. The goal of this course is for you to emerge literate in the basic language of mathematics and confident not only in reading mathematical proofs, but in constructing your own carefully written proofs of mathematical statements.

Expectations

• Math 210 is possibly the first mathematics course you will take that focuses on theory rather than computation. This can sometimes be a difficult transition for students to make. As such, frequent practice of the ideas and techniques we study in class will be essential. Each lesson will have suggested problems for you to look at. Before each class, I expect you to survey the relevant sections in the textbook. Then, before the next class, I expect you to review your class notes and attempt the suggested problems. As soon as you realize you are having difficulty, please come see me! I am happy to help you as much or as often as you need.

• I will assign homework every week. Some of the problems in these assignments will come from the suggested homework, and some will not. Your homework grade makes up a very large portion of your final grade in the course. I will use these assignments to monitor your progress in proof writing. Receiving an excellent score on homework problems will not only require a correct solution, but a carefully written one. I will be looking at your writing just as
much as I look at the mathematics. It is perfectly acceptable for you to work with classmates on homework assignments, but I expect you to write your own solutions and proofs to turn into me.

- On occasion, a specific homework problem will be selected for “peer review.” For these problems, you will read a classmate’s work and submit a review of it. Each student will then submit a revised version of that problem, based on reviewer comments. I will ask specific questions at each stage in the review. My hope is that this process will help you not only with your proof writing, but also with your critical reading skills. More details will follow during the semester.

- In addition to working on written mathematical communication, we will also work on your oral presentation skills of mathematical ideas. We will sometimes begin class with a student presentation of one of the previous lesson’s suggested homework problems. Each student will be required to present a problem multiple times during the semester. I prefer this to be handled on a volunteer basis, but will assign presenters if necessary.

- I will periodically send emails to your HPU accounts, and I will also update Blackboard frequently with class information. You need to be consistent in checking these sources in order to receive all necessary course announcements.

**Evaluation and Grading**

- In addition to the homework and presentations mentioned above, we will also have two in class exams, and a final exam. The tentative dates for the in class exams are September 29 and November 19, and your final exam is **Saturday, December 12, 8:30-11:30am**. Your grade will be determined by the following criteria:

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Grade Range</th>
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<tbody>
<tr>
<td>Homework</td>
<td>30%</td>
<td>98 ≤ A+ ≤ 100</td>
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<tr>
<td></td>
<td></td>
<td>78 ≤ C+ &lt; 80</td>
</tr>
<tr>
<td>Peer Reviews and Presentations</td>
<td>10%</td>
<td>92 ≤ A &lt; 98</td>
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<tr>
<td></td>
<td></td>
<td>72 ≤ C &lt; 78</td>
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<tr>
<td>Exam 1</td>
<td>15%</td>
<td>90 ≤ A− &lt; 92</td>
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<td></td>
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<td>70 ≤ C− &lt; 72</td>
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<tr>
<td>Exam 2</td>
<td>20%</td>
<td>88 ≤ B+ &lt; 90</td>
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<td></td>
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<td>68 ≤ D+ &lt; 70</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
<td>82 ≤ B &lt; 88</td>
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<td></td>
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<td>62 ≤ D &lt; 68</td>
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<tr>
<td></td>
<td></td>
<td>80 ≤ B− &lt; 82</td>
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<td></td>
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<td>60 ≤ D− &lt; 62</td>
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**Policies and Miscellanea**

- **Attendance Policy:** You are expected to attend every class and be on time. Attendance will be taken each day, though it will not count as a portion of your grade.

- **Electronic Devices in Class:** Cell phones, PDAs, etc. should all be turned off prior to the start of class. I expect that you will not be texting, sending emails, using Facebook, surfing the web, etc. during class. This is disrespectful to both your instructor and your classmates. If a student’s phone makes noise during a test, that student will receive an F on the test.
• **Make-Up Policy:** Make-ups for missed class events will not be given. If you know in advance you will be missing an exam, you may contact me in advance to schedule a make-ahead. If you miss class, it is still your responsibility to turn homework into me on time.

• **Honor Policy:** All students should be familiar with, and abide by, the Honor Code. Copying work done by others, whether in or out of class, is cheating and will not be tolerated. If cheating is observed during an in-class event or plagiarism is discovered on an assignment, the student will receive a grade of zero for that event. The event will also be reported to the Dean of Students. For details on the Honor Code, see http://www.highpoint.edu/campuslife/sga/

• **Academic Accommodations:** Students who require classroom accommodations due to a diagnosed disability must submit the appropriate documentation to Mrs. Irene Ingersoll, Coordinator for Disability Support, 405 Smith Library. Please inform her of your need for accommodations at the beginning of the semester. It is your responsibility as a college student to advocate for yourself. Accommodations are not retroactive.

• **Copyright Policy:** All printed materials disseminated in class or on the web are protected by Copyright laws. One xerox copy (or download from the web) is allowed for personal use. Multiple copies or sale of any of these materials is strictly prohibited.

• **Course Evaluations:** You will receive an email towards the end of the semester asking you to complete evaluations online for this course. These evaluations need to be completed no later than Wednesday, December 9. (Yes, I really do read them!)

• The last day to drop this course without record is August 31. The last day to drop with a W grade is October 30.