Intro to Mathematical Thought (Math 115), Fall 2014

Time: MWF 10:00-10:50 am
Room: Witmer 305
Instructor: Richard P. Millspaugh
Phone: 777-4603
E-mail: richard.millspaugh@und.edu
Office: Witmer 323
Hours: TR 9:00-10:20 am
W 8:30-9:20 pm
or by appointment

Final Exam: Wednesday, December 17 at 10:15 am

Solving problems is a practical art, like swimming, or skiing, or playing the piano; you can learn it only by imitation and practice . . . if you wish to learn swimming you have to go into the water, and if you wish to become a problem solver you have to solve problems.

George Pólya

Course Content and Goals. Many people think of mathematics as memorizing formulas so that they can use them to solve problems like those found at the end of textbook sections. Mastery of these formulas is important to some of us, but memorizing formulas and applying them to long lists of similar problems isn’t what mathematics is about. I hope that this class will help you view mathematics in a different way. The primary goal in this course is to make you a better, and more confident, problem solver. In order to achieve this goal, almost all of our time will be spent discussing and solving problems.

Class participation. Most of your time in class will be spent solving problems with your colleagues. Since this activity is of primary importance, your participation will determine a portion of your grade. Class participation will be worth 2 points per day for a total of 50 points.

Homework. There will be four short written assignments given during class. Each is worth 20 points.

Tests. There will be two tests this semester, each worth 50 points. Test dates will be announced in class at least one week in advance, but you should expect them to occur near the last week of September and the second week of November.

If you absolutely must miss a test for some valid reason (oversleeping is not a valid reason to miss a test) it is your responsibility to contact me to schedule a makeup. I will normally expect to hear from you before the scheduled time for the test. Except under the most extraordinary of circumstances, I will expect you to take the test within one week of the original test date. If you take a test under this policy, you should normally expect it to be slightly more difficult than the test given in class.

Final Exam. There will be a comprehensive final exam on Wednesday, December 17 at 10:15 am. The final exam in this course is worth 100 points.

The UND Policy on Final Examinations (see the Fall 2014 Class Schedule) will be strictly adhered to. Please note in particular that you forfeit your right to reschedule a final exam because you have three or more scheduled on the same day if you have not made arrangements by November 14.

Grades. Grades will be determined according to the following scale:

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<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>360–400</td>
<td>A</td>
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<tr>
<td>320–359</td>
<td>B</td>
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<tr>
<td>280–319</td>
<td>C</td>
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<tr>
<td>240–279</td>
<td>D</td>
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<tr>
<td>0–239</td>
<td>F</td>
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Please be aware that at the end of the semester I will assign grades based only on your performance on the items indicated above.

Office Hours. The office hours listed above are reserved for the use of my students. Please feel free to drop by at those times if you have questions about this class or if there is something else you need to discuss.
You may also try to find me at other times, but please understand that I might occasionally be involved in something that cannot be interrupted. In general, if my door is open then I’m probably available and if my door is closed then I’m probably not. If my door is open and I’m not in the office, you may have the department secretary (in room 313) track me down.

When you ask questions about problems you are working on, please be aware that I will usually want to see what you’ve been trying to do before I’ll answer your questions. This helps me try and address the particular part of a problem that you are having trouble with.

**Accommodations.** If you have emergency medical information to share with me, need special arrangements in case the building must be evacuated, or need disability accommodations in this course, please make an appointment to discuss that with me. If you plan to request disability accommodations, you are expected to register with Disability Services for Students, 190 McCannel Hall, 701-777-3425 voice/tty, dss@und.edu.

**Academic Misconduct.** Academic misconduct of any kind will not be tolerated. I consider a zero on the test or assignment in question to be the minimal consequence for any act of academic misconduct.