Intro to Calculus, Fall 2013

Instructor: Vitaly Lorman
Email: lorman@gmail.com
Office: Krieger 411
Office hours: Monday, 2-4 p.m.

Lectures: Monday, Wednesday, and Friday at 9 a.m. in Krieger 308

Sections (with TA Jordan Paschke): Tuesday at 1:30 p.m. in Shaffer 304

Textbook: College Algebra and Trigonometry, Mark Dugopolski; 5th Edition
Available from the university bookstore

Adding or Dropping: Please see
http://eng.jhu.edu/wse/asen_undergraduate_handbook/registration-policies

Topics we will cover: Equations, inequalities, functions, graphs, polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, trigonometric identities and conditional equalities, and applications.

Homework: Homework will be assigned each Wednesday, and will be due the following Wednesday at the start of class. Assignments will be returned to you in section.

Quizzes: There will be a short (5-10 minute) quiz at the beginning of each section meeting. The quizzes should primarily be viewed as a way to make sure you are keeping up with the course material.

Tests and Exams: There will be one (30 minute) test, two (50 minute midterms), and a (3 hour) final exam. Here are the exam dates:

Test: 18 Sept
Midterm 1: 9 Oct Note: This was originally scheduled for Tuesday, 15 October. It has been moved up a week
Midterm 2: 18 Nov Note: This was originally scheduled for Monday, 25 Nov. It has been moved up a week.
Final Exam: 11 Dec, 9 a.m., room TBA
**Grading:** Your final grade for the class will be determined as follows:

- quizzes: 10%
- homework: 10%
- test: 10%
- first midterm: 20%
- second midterm: 20%
- final exam: 30%

If you miss a quiz without a valid excuse (a letter from the Office of Academic Advising), your grade on it will be zero. Your lowest quiz grade will be dropped when I calculate the grade at the end of the semester.

**Support:** If you have questions or need some help with class material, there are many resources available to you. For example:

- my office hours: Monday, 2-4 p.m.
- your TA’s office hours: Tuesday, 2:45-4 p.m.
- Math Help Room: Krieger 213, M-Th 9 a.m. -9 p.m., F 9 a.m.-5 p.m.
- The Learning Den: Group Tutoring: see [www.jhu.edu/academic-assistance](http://www.jhu.edu/academic-assistance)

Please do not feel shy about asking for help or just checking that you understand something correctly. If you fall behind, I am happy to help with catching you up, but the sooner you do this, the better. Don’t wait until the day before an exam to catch up on several lectures’ worth of material!

*Ask me anything!* Don’t feel embarrassed about asking basic questions. These are very often the best questions to ask. Understanding the basics will go a long way towards helping you understand this class, future classes, and any other mathematical endeavors later in life.

**Calculator Policy:** You will not need a calculator in this course. Use of calculators is not allowed on homework and on exams.

**Absences:** Attendance in lectures and section meetings is mandatory but an occasional absence is not the end of the world. There will be no make-up exams. If you have a valid excuse to miss an exam, you must provide a letter from the Office of Academic Advising verifying this. In this case, your grade for the exam will be the weighted average of your grades in the other exams. If you miss an exam without a valid excuse, your grade will be zero.

**Special Aid:** Students with disabilities or other special needs who require classroom accommodations or other arrangements must make this known to me as soon as possible at the beginning of the semester, and be registered with the disability coordinator in the Office of Academic Advising.

**Collaboration:** Collaboration on homework is allowed and encouraged. However, each student must write up his/her solutions to the problems individually and in his/her own words - copying from another student’s paper is prohibited. Homework is an essential part of learning the course material. Failing to give it proper attention will significantly harm your performance on the exams and your overall grade for the class.
Academic Honesty: The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty and unfair competition.

Report any violations you witness to the instructor. You may consult the associate dean of student affairs and/or the chair of the Ethics Board beforehand. See the guide on "Academic Ethics for Undergraduates" and the Ethics Board Web site http://www.jhu.edu/design/oliver/academic_manual/ethics.html for more information.

Besides being dishonest and unfair to other students, copying homework assignments from your classmates or from the internet is not worth your time. Homework is only worth 10% of the grade, but if you don’t put time into the homework assignments, you will have a VERY hard time preparing for the exams. If you don’t put work into the homework assignments, your grade will suffer!

Tentative Course Outline:
The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the reading assignments.

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Textbook Sections</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>3-6 Sept</td>
<td>P1-P7</td>
<td>Prerequisite chapters</td>
</tr>
<tr>
<td>Week 2</td>
<td>9-13 Sept</td>
<td>1.1, 1.3, 1.4, 1.6, 1.7</td>
<td>Equations and Inequalities, Linear and Quadratic Equations, Absolute value</td>
</tr>
<tr>
<td>Week 3</td>
<td>16-20 Sept</td>
<td>Test, 2.1-2.3</td>
<td>Functions and Graphs; Transformations</td>
</tr>
<tr>
<td>Week 4</td>
<td>23-27 Sept</td>
<td>2.4-3.2</td>
<td>Polynomial and Rational Functions</td>
</tr>
<tr>
<td>Week 5</td>
<td>30 Sept-4 Oct</td>
<td>3.3-3.6</td>
<td>Polynomial and Rational Functions</td>
</tr>
<tr>
<td>Week 6</td>
<td>7-11 Oct</td>
<td>4.1-4.3</td>
<td>Midterm 1, Exponential and Logarithmic Functions</td>
</tr>
<tr>
<td>Week 7</td>
<td>15-18 Oct</td>
<td>4.3-4.4, 5.1-5.2</td>
<td>Trig Functions</td>
</tr>
<tr>
<td>Week 8</td>
<td>21-25 Oct</td>
<td>5.3-5.5</td>
<td>Trig Functions</td>
</tr>
<tr>
<td>Week 9</td>
<td>28 Oct-1 Nov</td>
<td>6.1-6.4</td>
<td>Trig Identities</td>
</tr>
<tr>
<td>Week 10</td>
<td>4-8 Nov</td>
<td>6.5-7.1</td>
<td>Trig Identities, Law of Sines</td>
</tr>
<tr>
<td>Week 11</td>
<td>11-15 Nov</td>
<td>7.2-7.4</td>
<td>Law of Cosines, Vectors, Complex Numbers</td>
</tr>
<tr>
<td>Week 12</td>
<td>18-22 Nov</td>
<td>7.5-7.6</td>
<td>Midterm 2, Complex Numbers, Polar Equations,</td>
</tr>
<tr>
<td>Week 13</td>
<td>25-26 Nov</td>
<td>7.7</td>
<td>Parametric Equations, Thanksgiving</td>
</tr>
<tr>
<td>Week 14</td>
<td>2-6 Dec</td>
<td>8.1, 8.2</td>
<td>Systems of Linear Equations, Review</td>
</tr>
</tbody>
</table>