

# Course Syllabus

## Math – 125: Precalculus

### Fall 2012

<b>Professor:</b> Ian Besse	<b>Office:</b> Price 208
<b>Email:</b> besse.ian@pacificu.edu	<b>Office Phone:</b> 503-352-1498
<b>Section 3 Lecture Times/Location:</b> MWF 1:00 – 2:05 PM in Berglund 216	<b>Section 4 Lecture Times/Location:</b> MWF 2:15 – 3:20 PM in Price 204
<b>Textbook:</b> Algebra and Trigonometry, 4 <sup>th</sup> ed., by Robert Blitzer, 2010	<b>Office Hours:</b> MWF 3:20–4:10, or by appointment.

#### Course Description:

Most science and mathematics courses require that students be comfortable working with functions symbolically, graphically, and numerically. Precalculus offers students the background they need to pursue these courses. An integral component of the course is translating information back and forth between grammatical and mathematical forms. Concentrating on functions and their properties, the course includes the study of several classes of functions including polynomial, rational, exponential, logarithmic, and trigonometric functions. The conic sections are also studied.

Prerequisite: MATH 122 with a minimum grade of C or placement.

#### Resources:

If you have not yet purchased the textbook, please do so soon. In the meantime, you may check out the reserve copy of the textbook from the library (2-hour checkout). You should also have a graphing calculator. The mathematics department has a limited number of TI-84 calculators for rent for \$20.00 for the semester. Go to the Natural Sciences Division Office on the first floor of Strain. All assignments and supplementary course materials can be viewed on the course Moodle site. This website should be your first point of contact for everything related to this course. In addition to visiting my office hours, you may also want to make use of the campus tutoring services.

#### Course Format and Grading:

**Homework (10%):** Homework plays a central role in the course. Exercises from the text will be assigned and collected weekly. These problems can be quite challenging and time consuming. Therefore, you should invest time each day toward completing the homework. Your homework will be graded on the following items:

- **Completeness:** An honest attempt on each exercise.
- **Performance:** You will be evaluated, in part, on the accuracy of your answers on a few problems randomly selected from each homework assignment.
- **Presentation:** Homework must be completed on standard 8.5" x 11" paper stapled in the upper left corner with your name and the assignment listed in the upper right corner of the first page. Homework that is difficult to read will receive a lower score.

**Quizzes (20%):** There will be several quizzes during the term. Quiz dates are listed in the calendar and are subject to change. No make-up quizzes are given. Some quizzes may be administered online on Moodle.

**Midterm Exams (40%):** There will be two midterm exams. The first will be held on **Wednesday, September 26** and the second will be held on **Wednesday, October 31**. Both midterm exams will be administered during class time and both will be cumulative, but the second will be weighted heavily toward material since the first midterm. Midterms must be taken in class on the exam days unless you have a Pacific University event. In this case, you must contact me in advance of the event to make arrangements.

**Final Exam (30%):** The final exam is on ***Friday, December 7 at 8:30 – 11:00 for the 1:00 class and Tuesday, December 11 at 3:00 - 5:30 for the 2:15 class.*** You must take the final at this time. Please make your travel arrangements accordingly.

### **Attendance**

It is imperative that each of you arrives to class on time every day. Students with a record of arriving late or missing class will receive a warning from me. If the behavior continues, further action (from a lower final grade to dismissal from the course) will result. If you will miss a class because of an official Pacific University event, you must let me know in advance. We will work together to schedule a time for you to complete, in advance, an exam that is missed because of such an event. Without this notice, no make-ups will be given. Due dates on homework are strict. No late work is accepted (see missed/late coursework policy below).

The course grade breakdown will be as follows:

Grade	Percentage
A	[92,100]
A-	[90,92)
B+	[88,90)
B	[82,88)
B-	[80,82)
C+	[78,80)
C	[72,78)
C-	[70,72)
D	[60,70)
F	[0,60)

There may be occasional variations to this plan. I try to keep the course Moodle site updated with current assignments and accurate due dates (but you are responsible for coursework assigned in class even if I fall behind in posting them online). Collaboration with other students in the class is encouraged, but work on which you are evaluated must be written by you alone, and in your own words. Copying others work not only constitutes plagiarism, but also serves as very poor preparation for exams.

### **Expectations:**

As a student enrolled in this course, it is expected that you will:

- Attend class, participate in class discussions, and ask questions
- Familiarize yourself with sections of the textbook **prior** to their coverage in lectures
- Complete all assigned work neatly, thoroughly, and on-time
- Work enough additional problems to ensure comprehension of course material
- Seek assistance from instructor during office hours when difficulties arise

You should expect that your instructor will:

- Arrive on-time for lectures
- Deliver well-prepared lectures
- Establish clear course expectations
- Evaluate coursework in a timely manner and provide constructive feedback
- Be accessible and approachable outside of class
- Promote an inclusive, supportive, and collaborative classroom environment

**Important Dates:**

Monday, Sept 3:	No class
Monday, Sept 10:	Last day to add, or to withdraw with no record
Friday, Oct. 5:	No class
Monday, Nov 5:	Last day to withdraw
Wed – Fri. Nov. 21-23:	No class (Thanksgiving Holiday)
Friday, Dec 7:	Section 125:03; Final, 8:30 – 11:00 AM
Tuesday, Dec 11:	Section 125:04; Final, 8:30 – 11:00 AM

**Late/Missed Coursework Policy:**

Due dates for all coursework are firm and late work is not accepted for credit. However, I understand that periodically circumstances outside of a student's control prevent the timely submission of work. In recognition of this fact, every student's lowest in-class quiz score and lowest homework score will be dropped prior to calculation of the final grade.

**Academic Misconduct Policy**

Pacific University has no tolerance for academic misconduct/dishonesty. It is university policy that all acts of misconduct and dishonesty be reported to the Associate Dean for Student Academic Affairs. Sanctions that may be imposed for such misconduct range from an "F" for the assignment, an "F" for the course, and suspension or dismissal from the university. Forms of academic misconduct include but are not limited to plagiarism, fabrication, cheating, tampering with grades, forging signatures, and using electronic information resources in violation of acceptable use policies.

**Learning Support Services for Students with Disabilities**

If you have documented challenges that will impede your learning in any way, please contact our LSS office in Scott Hall (ext.2107). The Director will meet with students, review the documentation of their disabilities, and discuss the services that Pacific offers and any appropriate ADA accommodations for specific courses.

**Tutoring and Learning Center (TLC)**

The TLC is located in Scott Hall 127. The center focuses on delivering one-on-one and group tutoring services for math and science courses and writing skills in all subjects. Students should consult with the center's director for information on tutoring available for other subjects. Day and evening hours; walk-ins welcome!

## Course Calendar

Week	Monday	Wednesday	Friday
<b>Aug. 27 – 31</b>	Introduction Review of functions emphasizing 2.6 <b>Practice Gateway Exam</b>	3.1 Quadratic Functions <b>Gateway Exam</b>	3.2 Polynomial Functions
<b>Sept. 3 - 7</b>	<b>Labor Day</b>	3.3 Dividing Polynomials	3.4 Zeros of Polynomial Functions <b>Quiz #1</b>
<b>Sept. 10 - 14</b>	3.5 Rational Functions <b>Must pass Gateway</b>	3.6 Polynomial & Rational Inequalities	3.7 Modeling
<b>Sept. 17 – 21</b>	4.1 Exponential Functions <b>Quiz #2</b>	2.7 Inverse Functions	4.2 Logarithmic Functions
<b>Sept. 24 – 28</b>	Review and problem day	<b>Mid Term 1</b>	4.3 Properties of Logarithms
<b>Oct. 1 – 5</b>	4.4 Exponential & Logarithmic Equations	4.5 Exponential Growth & Decay	<b>Break</b>
<b>Oct. 8 – 12</b>	5.1 Angles and Radian Measure <b>Quiz #3</b>	5.2 Right Triangle Trig	5.3 Trig Functions of Any Angle
<b>Oct. 15 – 19</b>	5.4 Trig Functions of Real Numbers	5.5 Graphs of Sin and Cos Functions	5.6 Graphs of other Trig Functions <b>Quiz #4</b>
<b>Oct. 22 – 26</b>	5.7 Inverse Trig Functions	5.8 Applications	6.1 Verifying Trig Identities
<b>Oct. 29 - Nov. 2</b>	Review and problem day	<b>Mid Term 2</b>	6.2 Sum & Difference Formulas
<b>Nov. 5 – 9</b>	6.3 Double, Half, Power Reducing	6.4 Product-Sum Formulas	6.5 Trig Equations
<b>Nov. 12 – 16</b>	7.1 Law of Sines <b>Quiz #5</b>	7.2 Law of Cosines	10.1 Ellipse
<b>Nov. 19 – 23</b>	10.2 Hyperbola	Thanksgiving Break	Thanksgiving Break
<b>Nov. 26 – 30</b>	10.3 Parabola		
<b>Dec. 3 - 7</b>	<b>Review</b>		

**1:00 PM Section Final Exam: Friday, December 7, 8:30 – 11:00 AM**  
**2:15 PM Section Final Exam: Tuesday, December 11, 8:30 – 11:00 AM**

*Be advised that everything listed in this syllabus is somewhat tentative and subject to minor changes as circumstances dictate. However, any changes that become necessary will be communicated as soon as possible to students either during lectures, through email, or on Moodle.*