Instructor: ________________________________  Office: ________________________________
Email: ________________________________  Phone: ________________________________

Office Hours: ________________________________

Required Materials:

*Precalculus for the University of Arizona, 6th edition*, by James Stewart, Lothar Redlin, and Saleem Watson – Available in UA Bookstore or as an e-book through Webassign
Webassign access code for online homework component
Graphing calculator (see below for specific details).

Main websites:  
http://d2l.arizona.edu
http://math.arizona.edu/~precalc/
http://www.webassign.net

---

**Catalog Course Description**
Review of algebra and trigonometry; study of functions including polynomial, rational, exponential, logarithmic and trigonometric. A graphing calculator is required for this course. We recommend the TI-83 or TI-84 models. Calculators that perform symbolic manipulations, such as the TI-89, NSpire CAS, or HP50g, cannot be used. For students who have high school credit in college algebra and trigonometry but have not attained a sufficient score on the UA Math Placement Test to enter calculus. Except as per University policy on repeating a course, credit will not be given for this course if the student has credit in a higher level math course. Such students may be dropped from the course. Examinations are proctored.

**Course Structure**
Math 120R is a 4 credit hour course. Students will meet in person 5 days per week except when there are no class meetings due to University holidays.

**Course Prerequisites**
Appropriate Math Placement Level or Proctored/Prep for College Algebra 88+ or Proctored/Prep for Calculus 65+.

**Course Objectives**
- To prepare students to be successful in the Calculus sequence at UA (Math 122A/B, 129 and 223)
- To help students develop and refine basic algebra skills by way of an integrated review of these skills as they are needed in the course.
- To promote problem-solving and critical thinking skills through the application of algebraic concepts to common situations.
- To enhance learning and understanding of algebraic concepts through the integrated use of graphing calculators.
- To promote and utilize the “Rule of Four”: All concepts are explored algebraically, numerically, graphically and in context with applications.
- To incorporate writing into the curriculum. Through writing about mathematics you will increase your understanding of the mathematical concepts.
- To help strengthen students’ general academic skills.

**Communication with Students**
Announcements and important course information may be sent out via official University email or through D2L. It is the student’s responsibility to check for messages and announcements regularly.
Accessibility and Accommodations
It is the University’s goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please meet with your instructor to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Resources (621-3268; drc.arizona.edu) and notify your instructor of your eligibility for reasonable accommodations by Friday, February 19, 2016. You will then be able to work with your instructor to plan how best to coordinate your accommodations. Please be aware that the accessible table and chairs in the classroom should remain available for students who find that standard classroom seating is not usable.

Attendance/Administrative Drops
Daily attendance is expected from every student. Students who miss the first class meeting will be administratively dropped unless they have made other arrangements. In addition, students with more than 3 unexcused absences may be administratively dropped from the course. (See Administrative Drop Policy at http://catalog.arizona.edu/2015-16/policies/classatten.htm) Other actions that may result in an administrative drop from this course include failing to sign up for Webassign by Friday, February 12, 2016, or missing more than 5 assignments. If you need to miss class for unavoidable circumstances, see your instructor as soon as possible.

- All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion.
- Absences pre-approved by the UA Dean of Students (or Dean’s designee) will be honored.

It is the student’s responsibility to notify the instructor in advance of an absence related to religious observation or an activity for which a Dean’s excuse has been granted, and to arrange for how any missed work will be handled.

Academic Integrity
Students are responsible to inform themselves of University policies regarding the Code of Academic Integrity. Students found to be in violation of the Code are subject to penalties ranging from a loss of credit for work involved to a grade of E in the course, and risk possible suspension or probation. The Code of Academic Integrity will be enforced in all areas of the course, including, but not limited to, classroom related activities, studying, teaching, research, intellectual or creative endeavor, administration, service or the provision of communication, computing or emergency services.

- Engaging in harassment or unlawful discriminatory activities on the basis of age, ethnicity, gender, handicapping condition, national origin, race, religion, sexual orientation, or veteran status, or violating University rules governing harassment or discrimination.

Students found to be in violation of the Student Code of Conduct are subject to disciplinary action. For more information about the Student Code of Conduct, including a complete list of prohibited conduct, see the following website: http://deanofstudents.arizona.edu/accountability/students/student-accountability

Student Code of Conduct
Students at The University of Arizona are expected to conform to the standards of conduct established in the Student Code of Conduct. Prohibited conduct includes:

1. All forms of student academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, and plagiarism.
2. Interfering with University or University-sponsored activities, including but not limited to classroom related activities, studying, teaching, research, intellectual or creative endeavor, administration, service or the provision of communication, computing or emergency services.
3. Endangering, threatening, or causing physical harm to any member of the University community or to oneself or causing reasonable apprehension of such harm.
4. Engaging in harassment or unlawful discriminatory activities on the basis of age, ethnicity, gender, handicapping condition, national origin, race, religion, sexual orientation, or veteran status, or violating University rules governing harassment or discrimination.

Students found to be in violation of the Student Code of Conduct are subject to disciplinary action. For more information about the Student Code of Conduct, including a complete list of prohibited conduct, see the following website: http://deanofstudents.arizona.edu/accountability/students/student-accountability

Other Relevant University Policies Relating to Conduct
Please take note of the following University policies:

- Policy on Threatening Behavior by Students: http://policy.web.arizona.edu/education-and-student-affairs/threatening-behavior-students
**Expected Classroom Behavior**  
Students should turn off all electronic devices during class unless the device is deemed necessary for the class by the instructor. This includes, but is not limited to cell phones, tablets, mp3 players, and laptops. If you have a disability-related accommodation that involves the use of a computer during class, please discuss this with your instructor in advance.

**Calculators**  
A graphing calculator (TI-83, 84, or 86) is required for this course. Calculators that perform symbolic manipulations (such as the TI-89 or TI-92 or certain TI-Nspire CAS) cannot be used. For in-class exams, quizzes, and the final exam, the only program allowed in your calculator is the QUADRATIC FORMULA program.

**Webassign**  
A computer grading program called Webassign will be used for homework problems assigned from the textbook. The course textbook (ebook) can be found in Webassign. Webassign can be accessed through the website www.webassign.net or through the University of Arizona’s D2L website (http://d2l.arizona.edu). Students will need to purchase access to Webassign. This can be done by one of the following two methods:
1. Purchase access directly through www.webassign.net using a credit card.
2. Purchase a brand new textbook at the University of Arizona bookstore, where an access code for Webassign will be provided.

When registering for Webassign, students will need to enter a valid email address and password. Also, a class key provided by the instructor will be required for successful Webassign access. More information about Webassign will be given to students on the first day of class. If you have previously used Webassign, you should use your previous username and password. If you have not used Webassign before, you are STRONGLY encouraged to use your University of Arizona email address.

**Homework**  
There are 4 components to homework: A Common Homework Assignment, Written homework, Webassign, and in-class quizzes. Late homework is generally not accepted. Students who register for the class after the first class meeting may not be able to make up missed assignments. Exceptions may be considered by the student’s instructor. Grading disputes regarding homework must be addressed within one week after the homework has been returned.

1. Common Homework Assignment (20 course points)  
   All Math 120R students are expected to complete this preliminary homework assignment. This assignment will be posted on the precalculus homepage on or around Wednesday, January 20th, and will be emailed to all 120R students around the same time. The due date for this assignment is Tuesday, February 9th.

2. Written Homework, Webassign, In-class quizzes (130 course points)  
   A homework/quiz/WebAssign policy will be distributed in class or posted at an online location to be announced by your instructor.

**In-Class Exams**  
There are 4 in-class exams. All exams are closed-book and closed-notes. The exact dates of the in-class exams will be announced by your instructor. Any questions regarding the grading of exams need to be cleared up within one week after the exam has been returned. Each exam is worth 100 points.

**Final Exam**  
The comprehensive Final Exam will be given on **Tuesday, May 10, 2016**, from **1:00 PM – 3:00 PM**. Please put this date in your calendar immediately. The location of the final exam will be provided by your instructor and posted on the Department of Mathematics homepage. The final exam is worth 200 points.

A study guide for the final exam will be posted as a PDF document on the Precalculus website.
Please note the following:
• University rules relating to final examinations may be found at:
  http://www.registrar.arizona.edu/schedule101/exams/examrules.htm
• The University final exam schedule may be found at:
  http://www.registrar.arizona.edu/schedules/finals.htm

Missed Exams
Only legitimate reasons will be considered for make-up exams. Legitimate reasons include UA class conflicts, Dean’s excuses, religious holiday’s recognized by the University, and verifiable emergencies. University related events without a Dean’s excuse will generally not be considered as an exam conflict (e.g., club meeting or club dinner).

If a verifiable emergency arises which prevents you from taking an exam at the regularly scheduled time, you must notify your instructor or the Mathematics Department as soon as possible. Students who fail to notify their instructor or Mathematics Department within 24 hours after the test has been given may receive a grade of zero on the exam.
Make-up exams will be administered only at the discretion of the Mathematics Department and/or the instructor. If a student is allowed to make up a missed exam, (s)he must take it at a mutually arranged time. No further opportunities will be extended. Failure to contact the Mathematics Department and/or instructor as stated above or inability to produce sufficient evidence of a real emergency will result in a grade of zero on the exam.

Grades

<table>
<thead>
<tr>
<th>Grade</th>
<th>Common Homework Assignment</th>
<th>Homework/Quizzes/Webassign</th>
<th>4 in-class tests</th>
<th>Final Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>20 points (2.7%)</td>
<td>130 points (17.3%)</td>
<td>400 points (53.3%)</td>
<td>200 points</td>
</tr>
</tbody>
</table>

| Total possible points | 750 points |

You are Guaranteed a Grade of:
A if you earn at least 675 points (90%)
B if you earn at least 600 points (80%)
C if you earn at least 525 points (70%)
D if you earn at least 450 points (60%)

Please note that neither exam scores nor final grades will be curved. No extra credit or bonus points are offered in this course.

A grade of Incomplete will be given only at the instructor’s discretion, according to University Policy as described at http://www.registrar.arizona.edu/gradepolicy/incomplete.htm

Withdrawal
A student may withdraw from the course with a deletion from record through February 18, 2016, using UAccess. A student may withdraw with a grade of "W" through April 2, 2016, using UAccess.

Using Math 120R as a Prerequisite for Other Courses
The Undergraduate Committee of the Department of Mathematics has adopted a policy that a grade of C or better in Math 120R is a necessary prerequisite for Math 122A/B (Calculus I). This policy took effect in the Fall 2010 semester. Students who receive a D in Math 120R will receive credit for the course towards graduation requirements, and will be able to use the course for their general education math requirement or as a prerequisite for Math 113, 116, 163, 263, or 302A, but will not be automatically qualified to register for Math 122A/B. Students may always exercise the option of taking the math placement tests to achieve placement into Math 122A/B.
## Tentative Weekly Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topics Covered</th>
<th>Assignments Due*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2/8-2/14</td>
<td>Linear equations/functions</td>
<td>Reading sections 2.1 - 2.3,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Graphs of functions</td>
<td>Webassign section 2.1, 2.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Characteristics of functions</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2/15-2/21</td>
<td>Average Rate of Change</td>
<td>Reading sections 2.4 - 2.6,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transformations of functions</td>
<td>Webassign sections 2.3 - 2.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Combining functions</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2/22-2/28</td>
<td>One-to-one and inverse functions</td>
<td>Reading section 2.7,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Webassign sections 2.6 - 2.7</td>
</tr>
<tr>
<td>4</td>
<td>2/29-3/6</td>
<td>Modeling with functions</td>
<td>Reading sections 3.1 - 3.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quadratic functions</td>
<td>Webassign section 3.1, 3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polynomial functions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Division of polynomials</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3/7-3/13</td>
<td>Rational functions</td>
<td>Reading sections 3.7, 4.1 &amp; 4.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exponential functions</td>
<td>Webassign sections 3.3, 3.7</td>
</tr>
<tr>
<td>6</td>
<td>3/14-3/20</td>
<td>Spring Break</td>
<td>N/A</td>
</tr>
<tr>
<td>7</td>
<td>3/21-3/27</td>
<td>Logarithmic functions</td>
<td>Reading sections 4.3 - 4.5,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Properties of logarithms</td>
<td>Webassign sections 4.1 - 4.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exponential and logarithmic equations</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>3/28-4/3</td>
<td>Applications of exponential &amp; logarithmic functions</td>
<td>Reading sections 4.6, 5.1 – 5.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unit Circle</td>
<td>Webassign sections 4.4 - 4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trigonometric functions of real numbers</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>4/4-4/10</td>
<td>Trigonometric graphs</td>
<td>Reading sections 5.3 - 5.5,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inverse trigonometric functions</td>
<td>Webassign sections 4.6, 5.1 - 5.3</td>
</tr>
<tr>
<td>10</td>
<td>4/11-4/17</td>
<td>Angle measure</td>
<td>Reading sections 6.1 &amp; 6.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Right triangle trigonometry</td>
<td>Webassign sections 5.4 - 5.5</td>
</tr>
<tr>
<td>11</td>
<td>4/18-4/24</td>
<td>Trigonometric functions of angles</td>
<td>Reading sections 6.3 - 6.4, 7.1 - 7.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trigonometric identities</td>
<td>Webassign sections 6.1 – 6.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sum and Difference trigonometry formulas</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>4/25-5/1</td>
<td>Double angle trigonometry formulas</td>
<td>Reading sections 7.3 - 7.5,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trigonometric equations</td>
<td>Webassign sections 6.4, 7.1 – 7.2</td>
</tr>
<tr>
<td>13</td>
<td>5/2-5/8</td>
<td>Final Exam Review</td>
<td>Webassign Sections 7.3 - 7.5</td>
</tr>
</tbody>
</table>

*Note: Due dates for assignments will be posted in class or at an online location by the instructor.

**Changes to the Course Policies**

The information contained in the course policies, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.