**Instructors: Sarah Andrews & Taryn Laird Office: Math 322 & Math 323**

**Teaching Assistants: Colin Clark**  **Phone: (520) 626-8274**

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**Office Hours: See D2L**

**Class Meeting Time: Thursdays 4:00 – 5:50 pm**

**Required Text**: The same as the text used in Math 120R, which is a co-requisite for this course.

**Online Course Management System:** <http://d2l.arizona.edu> . The D2L site will be used to disseminate information such as course policies and procedures, homework assignments, and all important announcements. Please check this site regularly, as it is critical for your success in the course.

### Catalog Course Description

This course is designed as a complement to MATH 120R.  Students enrolled in the course will participate in a weekly problem session pertaining to material covered in MATH 120R. Concurrent registration in MATH 120R is required.

**Course Overview**

The main purpose of this course is to help you learn to think about mathematics, and to become a critical and independent problem solver. The problems we will work on in class emphasize understanding concepts and de-emphasize rote memorization. In addition to the text, we will be using graphing calculators to help us better visualize the fundamental ideas, as well as to do routine computations.

As a student in this course, you and your peers will have the ultimate responsibility for doing the mathematics in the course. You will be the ones doing the “heavy lifting” in the course; that is to say the cognitive work needed to understand and master the concepts. The course is structured to engender discussion and group work aimed at solving problems.  The role of the instructor will be quite different from what you might have encountered in other math courses. In this course, the instructor acts primarily as a facilitator for your own exploration and learning. Frequently, a given question will have more than one possible answer; a problem may have no right method of solution. One answer or method might be better than another.

This is an inquiry-based course. Class time will consist primarily of small-group discussion about problems that will be posted prior to the class meeting. It is important that you prepare the week’s problems ahead of time, and be ready to discuss them.

We are looking forward to an active and exciting semester of learning mathematics!

**Course Co-requisite**

Concurrent registration in Math 120R is required.

**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.

**Course Goals**

* To promote problem-solving and critical thinking skills by working on Precalculus problems with other students.
* To improve understanding of concepts in Precalculus through the use of in-class discussion and problem-solving in small groups.
* To enhance learning and understanding of Precalculus concepts through the 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 help strengthen students’ general academic skills.

###### 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 Monday, February 19, 2018. 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 may 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/policy/class-attendance-participation-and-administrative-drop>) 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 homework. For more information about the Code of Academic Integrity policies and procedures, including information about your rights and responsibilities as a student, see the following website: <http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>

**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>
* Nondiscrimination and Anti-Harassment Policy: <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

**Your Responsibilities as a Class Member**

* The classroom is place where all students need to be engaged in learning. This means that it cannot be a place for casual conversations, reading the newspaper, doing homework for other classes, using your cell phone, etc. Students should turn off all electronic devices during class unless the device is deemed necessary for the class by the instructor.
* Work on every problem in the weekly problem set before coming to class, and bring your work with you to class. Be ready to concentrate on math and discuss the day's problems.
* Be ready and willing to participate in many different forms of interactive activities, including small-group discussion, explaining problems to others, and working out problems on the board.
* Be respectful and polite. Listen to your instructors and your fellow students when they are talking.
* In order to benefit from being in an interactive class, each student must come to class prepared.
* Be in your seat and ready to start when class is scheduled to begin and remain until the class is dismissed.

**Weekly Problem Sets**

Each week, a problem set will be posted for the next class meeting. Without actually working through each problem, you are expected to explain using complete sentences how you would approach each problem. One is expected to read each problem, write something about the problem and the approach you think you can use to solve the problem. Some ideas but not limited to: setting up the problem, drawing a picture, finding formulas, and looking up the vocabulary to help set of the problem. Problem sets will be assigned a grade based on preparation and quality of work.

**Grades**

Grades will be determined on the basis of attendance, problem sets, and participation.

***Attendance***: Attendance will be taken every class meetings, and your attendance grade will be calculated as a percentage of the class meetings attended.

***Weekly Problem Sets***: Weekly problem sets will be collected at the beginning of class and assigned a grade according to preparation and quality of work.

***Participation***: Each week you will receive a participation grade, based on your level of involvement in the class/group discussions.

Attendance 30 points

Problem Sets 30 points \*

Participation 30 points

*Total possible points*  90 points

\* If you miss class, you can still turn in the homework that week before the class time, either in room 108 of the Math building or in the instructor’s office.

You can receive up to 9 points for attendance, participation, and problem set each week (3 points each).

The grading key is as follows:

3 = excellent 2 = acceptable 1 = poor 0 = fail

Please note that there are no exams for this course and there is no final exam.

We will not have class on Thursday, March 29. The last regularly scheduled class is Thursday, April 30.

You are guaranteed a grade of: S if you earn at least 80%

P if you earn at least 60%

A grade of E may be awarded if a student scores below 60%.

**Withdrawal**

An engineering student must have dropped/withdrawn from Math 120R before drop/withdraw from Math 196L. If one drops Math 120R, they may elect to stay in this course, but must do the required work without the support of Math 120R.

A student may drop from the course with a deletion from record using UAccess until February 16. A student may withdraw from the course with a “W” using UAccess until March 31.

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>

**All cell phones must be put away and turned off during the class.**

**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.