

## De Anza College

### Math 41, Precalculus I: Theory of Functions Winter 2018, Section 26, CRN 34653

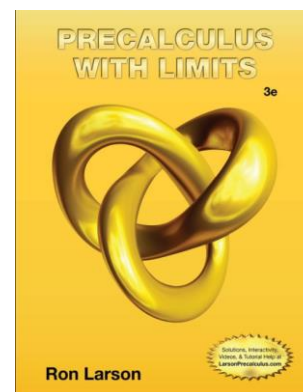
#### Course and Contact Information

<b>Instructor:</b>	Andrew Jianyu YU
<b>Office Location:</b>	E Squad, Room E37
<b>Email:</b>	andrewjianyu.yu26@gmail.com yujian@fhda.edu
<b>Office Hours:</b>	Tuesday & Thursday 12:30 PM to 1:30 PM Tuesday & Thursday 6:15 PM to 6:30 PM
<b>Class Days/Time:</b>	Tuesday & Thursday: 4:00 PM to 6:15PM
<b>Classroom:</b>	G Squad, Room #5
<b>Prerequisites:</b> <b>Advisory:</b>	Math 114 College Math Preparation Level 3: Intermediate Algebra or equivalent (with a grade of C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year. Advisory: EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273.

#### Required Materials:

Larson, "Precalculus with Limits", **3rd edition**. Boston: Cengage, 2014  
ISBN-10: 1133947204; ISBN-13: 978-1133947202

**IMPORTANT NOTE: Do not purchase the second edition. The exercise problems do not match.**



**Technical Requirement:**

(#1) Your email account: please check your email regularly. It is recommended to connect your email with your smart phone. I will try to email the plan for the upcoming week during weekend. You are encouraged to ask me any homework questions through email.

**Course Description:**

Polynomial, rational, exponential and logarithmic functions, graphs, solving equations, conic sections.

**Attendance:**

Attendance to all class sessions is required. After 2 days of absences your grade may be lowered or you may be dropped from the class; however, it is your responsibility to officially drop the course should you decide to do so. You need to sign your name on a sign-in sheet during every class. Please understand that you must attend every class to avoid falling behind. If you did not attend a class meeting, then you are responsible for learning all the materials being covered in class by yourself. Most importantly, if you get caught for signing the attendance sheet for your classmates, then you and your classmates will be marked as absent on that day.

**Office Hours**

Think of the office hours as free tutoring for homework problems and to catch up with class material. It is also an excellent opportunity to get to know your fellow classmates and your instructor. If you come to the office hours to ask questions on the homework problems, please come prepared. I expect that you have thoroughly read the problem and at least attempted to solve it yourself. Please feel free to ask questions any time before or after class, as they may be of interest to other students.

**Homework: 50 points each, 20% of your semester grade.**

Please submit your homework in the beginning of class. Your lowest homework score will be dropped. Please circle your final answers. Late homework is not accepted. The score of late homework is zero. Only the selected problems will be graded. Please show all of your work; otherwise your homework will not be graded. You are encouraged to discuss homework assignments with other students, but you must write up your solutions independently. Copying answers to homework problems from other people or other sources (including the internet) is not acceptable. You are expected to turn in completed solutions - show your work on all steps. Ask questions in class and during the office hours. Do not wait until the day before an assignment is due to start working on it. Please staple all sheets together. If you write your homework in your notebook, please remove the left margin before you submit your homework. Points will be deducted if your homework does not satisfy two conditions mentioned above.

**Quizzes: 30% of your semester grade.**

A weekly quiz will be given at the due date of the weekly homework. I will give the quiz during the last 10 minutes of class. Quiz problems are very similar to homework problems. All the quizzes are closed book and closed notes. You are allowed to use a calculator on the quiz. Please circle your final answers. No make-ups quizzes will be given. Your lowest quiz score will be dropped.

**Midterm: 30% of your semester grade. (There are 2 midterms in this quarter)**

All exams are closed book and closed notes. You are not allowed to use any electronic devices except for a non-graphing calculator. If necessary, a formula sheet will be provided. Midterm date will be announced at least one week in advance. Practice midterm will be given. There will be no make-ups for missed exams after the exam has been given. However, prior to an exam, rescheduling arrangements may be considered for illness and other special circumstances. You are not allowed to share calculators during midterm.

**Final Exam: 20% of your semester grade.**

Final exam is cumulative. It covers all the materials being covered in this semester. This is a closed book and closed notes exam. You are not allowed to use any electronic devices except for a calculator. If necessary, a formula sheet will be provided. There will be no make-ups for missed exams after the exam has been given. However, prior to an exam, rescheduling arrangements may be considered for illness and other special circumstances. You are not allowed to share calculators during final exam.

**Grading Rubrics:**

Your semester grade will be assigned in the following standard:

A: 100% to 92%	A-: 91% to 90%	
B+: 89% to 86%	B: 85% to 82%	B-: 81% to 80%
C+: 79% to 74%	C: 73% to 70%	
D: 69% to 60%	F: below 60%	

**Academic Integrity**

- Please be honest, do not copy other people's work.
- If you cheated and get caught during the quiz and exam, I will give you a zero on that assignment. Here are examples of cheating.
- Looking or copying other classmates' answers during the test.
- Passing a slip of paper to your classmate.
- Using your cellphones to browse on Internet or reading the pictures of your notes, homework, or any other resources.
- Please leave your cellphone on my table if you want to go to the restroom.

**Classroom Discipline:**

- Please be on time.
- If you plan to leave early, please sit close to the door.
- Do not use your cellphone during class.
- Do not use your computer during class unless you are being asked to do computations in your computer.
- Please respect your classmates at all times.
- No talking except to ask questions of the instructor or answer questions posed by the instructor. Even one side conversation can carry throughout the room and distract other students. Students who are disruptive will be removed from the course.

**Available Support Services:**

There are two tutorial centers on the De Anza campus. S-43 provides tutoring for Math and Science, else. Drop-in tutoring is always available. Individual tutoring is also available.

**Academic Adjustments for Students with Disabilities:**

In coordination with the Disability Support Services, reasonable accommodation will be provided for eligible students with disabilities. For more assistance, please contact the DSS Student Community Services Building, Room 141 or call 408-864-8753.

**Class Conduct Policy:**

Students are responsible for adhering to the Code of Student Conduct outlined in the De Anza College Catalog and the De Anza Student Handbook, available online.

Students who engage in disruptive behavior—conduct that interferes with the instructional, administrative, or service functions of the course – can be subject to disciplinary action, including suspension and/or expulsion from the course and/or college. Specifically, cell phone interruptions, the use of iPods, habitual profanity or vulgarity, and continued willful disobedience will result in disciplinary action.

**Expected Preparation for Class:**

Students must come to class with the required assigned texts/textbook(s) each class period, and they must come prepared with all work completed, as assigned. Students should plan to spend a minimum of two hours outside of class for each hour spent in class to learn and make satisfactory progress in the class.

**Attendance, Drops, Withdrawal:**

Regular attendance is important for success in math class as each day's work builds upon what came before. You are expected to attend all classes, arrive on time & stay for the entire class. Late arrival/early departures are disruptive to the class and to your classmate's learning. The instructor reserves the right to drop students who miss more than 2 classes during the quarter or who miss any classes in the first two weeks. However the instructor may or may not perform such a drop/withdrawal.

**Educational Access:**

Please see instructor during office hours to discuss your situation confidentially if you have accommodations; you should see the instructor during the first week of class or as soon as you receive approval from the appropriate support service.

For information about eligibility, support services or accommodations due to physical or learning disability see:

- Disability Support Service (DSS): [www.deanza.edu/dss](http://www.deanza.edu/dss) Location: SCS-141 (408) 864-8753; TTY (408) 864-8748
- Educational Diagnostic Center (EDC): [www.deanza.edu/edc](http://www.deanza.edu/edc) Location: LCW 110; (408) 864-8839
- Special Education Division; [www.deanza.edu/specialed](http://www.deanza.edu/specialed) (408)-864-8407

**Class Cancellation, Emergency:** <sup>[[ ]]</sup><sub>[SEP]</sub>

If class is canceled for any reason, or if an emergency causes campus to be closed, assume that any quiz, exam or due date scheduled on that date will be rescheduled to our next class meeting. If there are other changes, I will announce them in class after classes resume. Check the website and email; if necessary and if possible, I may post a message. <sup>[[ ]]</sup><sub>[SEP]</sub>

**Important Dates to Remember (De Anza College Academic Calendar):**

Monday, January 8	First day of Winter Quarter 2018
Saturday, January 20	Last day to add quarter-length classes. Add date is enforced.
Sunday, January 21	Last day to drop a class with no record of grade. Drop date is enforced.
Sunday, January 21	Last day to drop for a full refund or credit (quarter-length classes). Drop date is enforced.
Friday, February 2	Last day to request pass/no pass grade. Request date is enforced.
Friday, March 2	Last day to drop with a "W". Withdraw date is enforced.
Monday, January 15	Holiday: Observance of Martin Luther King's Birthday
Friday to Monday, February 16 to 19	Holiday: President's Day Weekend. No classes.
March 26 to 30	Final Exam's Week

**Chapters and Topics to be Covered:****Chapter 1: Functions and Their Graphs**

Section 1.1: Rectangular Coordinates

Section 1.2: Graphs of Equations

Section 1.3: Linear Equations in Two Variables

Section 1.4: Functions

Section 1.5: Analyzing Graphs of Functions

Section 1.6: A Library of Parent Functions

Section 1.7: Transformations of Functions

Section 1.8: Combinations of Functions: Composite Functions

Section 1.9: Inverse Functions

Section 1.10: Mathematical Modeling and Variation

**Chapter 2: Polynomial and Rational Functions**

Section 2.1: Quadratic Functions and Models

Section 2.2: Polynomial Functions and Higher Degree

Section 2.3: Polynomial and Synthetic Division

Section 2.4: Complex Numbers

Section 2.5: Zeros of Polynomial Functions

Section 2.6: Rational Functions

Section 2.7: Nonlinear Inequalities

**Chapter 3: Exponential and Logarithmic Functions**

Section 3.1: Exponential Functions and Their Graphs

Section 3.2: Logarithmic Functions and Their Graphs

Section 3.3: Properties of Logarithms

Section 3.4: Exponential and Logarithmic Equations

Section 3.5: Exponential and Logarithmic Models

**Chapter 10: Topics in Analytic Geometry**

Section 10.1: Lines

Section 10.2: Introduction to Conics: Parabolas

Section 10.3: Ellipses

Section 10.4: Hyperbolas

**The professor reserves the right to make changes to the syllabus, including project due dates and test dates (excluding the officially scheduled final examination), when unforeseen circumstances occur. These changes will be announced as early as possible so that students can adjust their schedules.**



**Student Learning Outcome(s):**

\*Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic, and tabular representations.

\*Synthesize, model, and communicate real-life applications and phenomena using algebraic and transcendental functions.