Instructor Information

Name: Salvador Guerrero E-mail: guerrerosalvador@fhda.edu

Office Hours: Tuesday/Thursday 3:05 – 3:55 pm in E37; 8:45 – 9:10 pm in S16

Course Information

Title: Pre-Calculus I: Theory of Functions

Location and Time: S16 on Tuesday/Thursday 6:30 - 8:45 pm

Website: we will be using Canvas (deanza.instructure.com)

Materials:

Text (required): OpenStax Precalculus (1, 2, 3, 4, 10) or Precalculus: An Investigation of Functions, 2nd

edition by Lippman and Rasmussen (1, 2, 3, 4, 9)

and/or

Precalculus by Stitz and Zeager

and/or

Precalculus with Limits, 3rd edition by Larson (2nd edition okay) (1, 2, 3, 10, Appendix A)

Technology (optional): Graphing calculator (TI-84 recommended) or computer based graphing utility. Note: Technology will not be allowed on any quizzes or exams, it is only recommended for further understanding while completing homework and investigating course material.

Other: Pencil, eraser, and spiral notebook or composition book.

Note: Exams and quizzes must be completed using pencil.

Requisites:

Prerequisite: Mathematics 114 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: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Hours: Five hours lecture (60 hours total per quarter).

Note: it is advised that you set aside two hours of study time per hour spent in class.

Description: This course will provide an in-depth look at polynomial, rational, exponential and logarithmic functions, graphs, solving equations, and conic sections.

Assignments:

There are a number of benefits to reading the text before class – classroom discussion becomes
more conversational, you see the material multiple times, and you have time to formulate
questions. Reading will be assigned as topics and concepts, and the relevant sections of each

textbook listed. I encourage you to read the text that best fits your learning needs, making sure to take notes as you do. You might also consider watching the posted short video lectures corresponding to the reading.

- After completing the reading you should check your understanding by completing all, or at least
 most, of the online homework. You should write neat, complete solutions to the problems in
 your notebook or composition book in order to practice organizing your thoughts and
 communicating mathematics. You should aim to complete as much of the assignment as
 possible before we discuss the material in class so that we may address any questions you have.
- Another important part of learning mathematics is to use the (mathematical) tools you have learned and are learning to solve problems which are not always familiar. We will practice this skill by completing classwork, typically in groups but sometimes individually or as a class. This work should be neatly written up on loose leaf paper as it will be turned in as part of your weekly quizzes. You are expected to work through the problems in order to learn and should finish at home any that are not completed in class.
- There will be seven 20-30 minute in-class **quizzes** with questions directly from the homework and classwork. The lowest two quiz scores will be omitted.
- There will be three midterm **exams**. If you complete the project your lowest exam grade (only one) will be replaced by the final exam grade, if it helps your grade.
- There will be one optional **project** to further develop your understanding of the course material.
- A two hour comprehensive **final exam** will be administered on Thursday March 29, 2018 from 6:15 8:45 pm. The final is mandatory and must be taken at the scheduled time. Any student not taking the final will receive a grade of F.

Grading:

- **Reading** will be assessed by a short assignment due before each class. Taking neat notes while you read is also a good way to show that you have taken the time to deeply understand the material (see "Contract Grading").
- Online Homework consists of approximately 10 15 exercises per section and will be due the night after the material is discussed in class. Make sure to start early!
- **Classwork** will be inspected for completion and will count as part of your quiz grade; feedback will usually be provided as you work on the worksheets during class time.
- Quizzes and Exams will be graded mostly as correct or incorrect and feedback provided. Exams and quizzes may be revised and resubmitted for additional credit (see Canvas for details).
- Projects will be graded as No Credit, Unsatisfactory, Marginal (Needs Improvement),
 Satisfactory (Meets Standards), Good (Exceeds Standards), or Excellent (Far Exceeds Standards).
 A more specific rubric will be provided with each project. Late projects will not be accepted.
- **Final Exam** will be graded with much consideration to partial credit since there is no possibility to re-work any mistakes.
- Course Grades will be determined by a "Grading Contract" (see canvas) or "Standard Grading."

Standard Grading:

Assignment weight:

Reading

Grading Scale:

Online	5%	If your overall grade is at least, then your letter grade is at least						
Homework		98%: A+	92%: A	90%: A-				
Quizzes	10%	88%: B+	82%: B	80%: B-				
Midterm exams	45%	78%: C+	70%: C	60%: D				
Project	0/10%	A student earning less than 60% will receive a grade of F.						
Final Exam	35/25%	Note: there is typically a curve applied before computing final grades.						

(Tentative) Schedule:

Week	1	2	3	4	5	6	7	8	9	10	11	12
Tues		Quiz1	Quiz2	Exam1	Quiz3	Quiz4	Exam2	Quiz5	Quiz6	Exam3	Quiz7	Х
Thurs												Final

Note: the schedule is subject to change – any changes will be announced in class and noted in the course calendar.

Policies and Resources

Academic Integrity: Cheating, plagiarism and other forms of academic dishonesty will not be tolerated. Students are expected to be honest and ethical at all times in their pursuit of academic goals. A Student caught cheating, plagiarizing, or otherwise violating the rules for an assignment will receive a grade of 0 on the assignment in question; repeat offenders will receive a grade of F in the course. In either case, a student may be referred to the Dean for academic discipline. No grade of 0 due to academic dishonesty will be dropped or replaced.

Classroom Courtesy: Your interactions with the instructor as well as your fellow classmates should be courteous and respectful at all times. Every student is entitled to learn in an environment free of distractions or disruptions (including phones, headphones, etc.). Students who are disrespectful or disruptive can, and will, be asked to leave. If a student does not leave after being asked they will be dropped from the course and referred to the Dean. Audio/Video recordings of lecture are prohibited.

Attendance: Attendance is required and you are responsible for all material covered in class. I expect you to arrive to class on time and stay until class is dismissed. If you miss a class, contact a fellow student to find out what was covered. Also:

- Students who remain enrolled in a class beyond the published withdrawal deadline, as stated in the class schedule, will receive an evaluative letter grade in this course.
- It is the student's responsibility to add, drop, or withdraw from classes before the deadlines stated in the college catalog. You should talk to me before withdrawing.
- Excessive absences may result in being dropped, at the discretion of the instructor.

Tutoring/Additional Help: Please consider the following (free) resources for additional help:

- In Person Tutoring: https://www.deanza.edu/studentsuccess/mstrc
- On-line Tutoring: http://deanza.edu/studentsuccess/onlinetutoring

• The internet: it is the future (2016), a time when information is literally at our fingertips.

Accommodation of Disability: Students that have any disability, either permanent or temporary, which might affect their ability to perform in this class should contact me immediately. For information or questions about eligibility, support services or accommodations to disability (physical or learning disability) see the contacts below:

- Disability Support Services (DSS): http://www.deanza.edu/dss
- Educational Diagnostic Center (EDC): http://www.deanza.edu/edc
- HOPE De Anza: http://www.deanza.edu/hope

English as a Second Language: ESL students may use a translator and/or dictionary (print only, to be approved by instructor) during exams and quizzes. Please visit the college's Listening and Speaking Center (LSC) for additional resources http://www.deanza.edu/studentsuccess/lsc/

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.