

# Math 41 PreCalculus I: Theory of Functions

5 units

De Anza College

Fall Quarter 2017

CRN: 24181 (MATH DO41,62) 6:30 PM to 8:45 PM Monday and Wednesday

E 32

Instructor: John Banks

Textbook: Precalculus with Limits, 3th edition...Larson Prerequisite: Precalculus.

Office Hours: Monday 5:30 PM to 6:15 PM and Wednesday: 5:20 PM to 6:00 PM in the Math, Science, & Technology Resource Center, S43.

E-mail: jab@jabco.org

Grading: Grades are based on the total points scored on Homework, Quizzes, Exams, and the Final Exam where the weight of each is applied in the following way

Homework.....	5%
Exams (3).....	70%
Final Exam.....	25%

$$\text{Grade Total} = \frac{\text{Homework}}{\text{possible}} \cdot 5 + \frac{\text{Exams}}{300} \cdot 70 + \frac{\text{Final Exam}}{100} \cdot 25$$

Usually 100-90 is an A, 89-80 a B, 79-70 a C, 70-58 a D, below 58 a F.

General In this course we will cover several sections of the textbook during each class meeting. Come to class prepared. Read the sections through before I talk about them in class. Keep current with your homework. *Practice your Algebra.*

Attendance This is one of the most important factors linked to success in a college course. You are *expected* to attend all class sessions. If you miss four or more classes (without a reasonable excuse) you *could* be dropped from this course. Your success is very important to me and I can best help you if you attend class.

Questions E-mail me at the above address if you have any questions outside of class. I will send easy answers back as e-mail and harder (with more symbols) answers as attached PDF files.

Homework Homework will be assigned for each class meeting. It will be collected two class periods later. Doing homework will give you the best chances to pass this class. Don't fall behind in your homework. If you are having troubles with the assignments, come and find me after class *or* before class or contact me via e-mail. Get help from tutors. Go to the math lab. But just don't let it slide. Normally Every Other Odd. Score 5 points/section. Late 2 points/section.

Canvas/Class Portal Sample Exams, Keys, etc. will be posted on My Class Portal/Course Studio.

Cell Phones, pagers, PDAs, etc. Please turn these devices off. You will **not** be allowed to use devices that can connect to the internet as a "calculator". Get a proper calculator.

Cheating Cheating is not permitted. You will receive a '0' on all work where you are caught cheating. Camera phones or other similar devices will NOT be permitted during quizzes or exams. Use of these devices will result in a '0'.

Other If you have a learning or physical need that will require special accommodation, please make an appointment with our Disability Support Programs & Services (DSPS) Division. They will evaluate you and inform me of your needs.

Exams There will be three exams. These exams will be closed book, no notes, so be prepared. No make-up exams. There will be a number of different versions of each exam. The exam dates are: **Oct. 11, Nov. 1, and Nov. 27.**

Final Exam It will be comprehensive. Final Exam will be on Thursday, **December 13, 2017. 6:15 PM to 8:15 PM**

Note: Dates of exams and number of exams are subject to change due to unforeseen circumstances. Remember to *always* read the fine print.

PLEASE TURN OVER for Course Objectives and Student Learning Outcomes

Course Objectives

- A. Examine the definition of a function and investigate the implications and properties of this concept
- B. Explore graphs of functions of the form  $y = f(x) = x^p$
- C. Create new functions from existing functions
- D. Graph and analyze exponential and logarithmic functions and solve related equations
- E. Graph and analyze polynomial functions and solve related equations and inequalities
- F. Graph and analyze rational functions and solve related equations and inequalities
- G. Graph and analyze conic sections in rectangular coordinates
- H. Examine the logic of conditional and bi-conditional statements as they appear in mathematical statements

=====

Student Learning Outcomes After successfully completing Math 41, the student should be able to

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.

=====