Precalculus: Algebra (4 units)

Classroom and Time: Salazar Hall-C266, Monday and Wednesday from 9:50 a.m. to 11:30 a.m.
Workshop: Salazar Hall-C266, Monday and Wednesday from 11:40 a.m. to 12:30 p.m.
Instructor: Carlos Arcos
Office: Simpson Tower 310
Office Hours: Simpson Tower 310: Monday through Thursday 9:00 a.m. to 9:40 a.m.
Tutorial Hours: Salazar Hall 357: Friday 9:00 a.m. to 11:40 a.m.
Email: Carlos.Arcos3@calstatela.edu (This is the best way to contact me since I read my email several times a day.)

General Catalog Course Description:
This course will cover limits, continuity, derivatives, discrete models and their stability, extreme values, long-term behavior of systems, approximation, Newton’s method, with a focus on applications in biology.

Prerequisite:
(a) Score of 50 or more on (or exemption from) ELM, or
(b) Math 91 with a minimum C grade, or
(c) Satisfactory score on placement examination.
(d) Must be enrolled in Math 104AP.

Materials:
(b) Three Blue Books: 11” x 8.5”, 8 leaves (16 pages). Turned them in to the instructor by 2nd week.
(c) A scientific calculator - it must have keys for evaluating exponentials, logarithms, and sine and cosine.
(d) A ruler, a pencil, and an eraser.

MUST BRING CALCULATOR, RULER, PENCIL, and ERASER to EVERY CLASS!
NO CELLPHONE CALCULATORS ALLOWED!!

Topical Outline:
Functions; exponential and logarithmic functions; polynomials and rational functions; systems of linear equations and matrices; sequences and series including arithmetic and geometric series.

Student Learning Outcomes: Students who successfully complete this course will be able to:

- Find the domain and range of a function, apply transformations to functions, compose functions, find the inverse of a 1-1 function.
- Graph, compute, and apply exponential and logarithmic functions; expand and combine logarithmic expressions; use the laws of logarithms; solve exponential and logarithmic equations.
- Graph polynomial functions; find the roots (zeros) of a polynomial function; understand the rational roots theorem; factor a polynomial into linear factors.
- Solve systems of linear equations using Gaussian elimination.
- Understand matrix algebra, including adding, subtracting, and multiplying matrices.
- Graph rational functions.
- Understand how to work with sequences including geometric and arithmetic sequences.

ADA Statement:
Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation.

Academic Honesty Statement:
(a) You are expected to do your own work.
(b) Copying the work of others, cheating on exams, and similar violations will be reported to the University Discipline Officer, who has the authority to take disciplinary actions against students who violate the standards of academic honesty.
Emergency Preparedness: The meeting point for Salazar Hall is in the parking lot at the bottom of the ramp. In an emergency, leave the building using staircases (and in an earthquake, wait to do so until the shaking has stopped). Move quickly to the meeting point and follow the instruction of the building coordinators. Make sure to check in with me so I know that you are accounted for. If one of your classmates needs help in evacuating, please assist. If you know that you will need assistance in an emergency and it is not obvious that this is the case, please see me so I can be aware of your need for assistance.

Requirements:
(1) Do all homework and computer assignments; (2) Take the quizzes; (3) Do the in-class assignments; (4) Take the midterm exams; (5) Take the final exam.

Grading System:
This course will be graded based on the sum of percentage points you obtain on the categories below. The grading key for assigning the course letter grade is: A: 90-100%, B: 75-89%, C: 60-74%, D: 45-59%, and F: < 44%. I will use +/- where appropriate.
1. Homework Assignments (10%) Absolutely no late homework!
   (a) Please, write the section number and the list of homework exercises on top of the front page of each assignment.
   (b) Please, staple the homework for each section.
   (c) Please, do not staple together homework assignments of different sections.
   (d) The homework for a particular section is due one week from the date we start covering it in lecture.
   (e) I will not accept late homework and reject any messy and/or disorganized homework.
   (f) You will get no credit for a question if you just write the final answers without work or explanation.
2. Quizzes/In Class Assignments (10%) Absolutely no make-up quizzes!
   (a) Based on material and examples covered in lecture.
3. Midterm Exams (30%) Absolutely no make-up midterm exams!
   (a) Two midterm exams: on the Wednesday of the 4th week and the 8th week.
   (b) Based on the material covered in lectures, quizzes, class activities, and homework assignments.
   (c) You will need a calculator, a ruler, a pencil, and eraser.
4. Final Exam (40%) Absolutely no make-up final exam!
   (a) Date and Time: Wednesday, December 09 from 10:45 a.m. to 1:15 p.m.
   (b) The final exam will be comprehensive.
   (c) It will be based on material covered in class, midterm exams, quizzes, homework, and computer assignments.
   (d) You will need a calculator, a ruler, a pencil, and eraser.
5. Writing Assignment (10%)
   (a) Answer the questions under “Writing in Mathematics” at the end of each section.
   (b) I will let you know which questions to answer when I assign the homework for each section.
   (c) Must use MS Word and the Equation editor to write formulas.
   (d) You must include the questions with the corresponding answer.
   (e) It is due at the end of the quarter (10th week).
   (f) At the end of the quarter you will send me a pdf file that contains your Writing Assignment.

Student Responsibilities: (Exchange contact info with a classmate(s.))
(a) You are responsible for being aware of all announcements that are made in class, such as changes in exam dates, due dates of homework and papers, and cancellation of class due to instructor’s absence.
(b) You are responsible for announcements made on days that you are absent.
(c) You must check your CSULA email account regularly for information from the instructor and the Department. Failure to do so may result in missed deadlines or other consequences that might adversely affect you. Note that you can forward your CSULA email to any other account of your choosing.

Classroom Etiquette: To minimize distraction to others and to maximize our time:
(a) Please do not go in and out of the classroom.
(b) Please turn-off cell phones and put them away (CELL PHONES ARE NOT ALLOWED IN CLASS!).
(c) Please do not send/receive text messages.
(d) Please do not engage in any activity that disturbs the class in any way or form.
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<th>Important Dates:</th>
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<td>DROP Deadline and to SWAP Classes: Thursday,</td>
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<tr>
<td>October 08, 2015</td>
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<td>ADD Deadline: Thursday, October 08, 2015</td>
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<td>“W” Withdrawal Deadline: Thursday, November</td>
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<td>12, 2015</td>
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<td>Emergency Withdrawal Deadline: Thursday,</td>
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<td>December 03, 2015</td>
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**Information about Quarter to Semester Conversion (Fall 2016):**

All CSULA students need to do either one of two things before we transition to the semester system:

1. Plan ahead so that you can graduate before the transition.
2. Create an individual advisement plan (IAP) if you will be graduating after the transition.

If you need to develop an IAP, when you log into your GET account, you will get a pop-up message informing you of this. For more information, please visit the website for the Office of Semester Conversion (http://web.calstatela.edu/academic/aa/semester/students/).

For help in planning ahead to graduate before transition or in creating an IAP, please contact one of the offices below.

For Q2S planning and advisement contact:

**UNDECLARED MAJORS:**

University Academic Advisement Center (UAAC)
Library Palmer Wing (PW) Room 1040A
(323) 343-3150
http://www.calstatela.edu/academicadvisementcenter

**DECLARED MAJORS:**

Your College Advisement Center
For example, Math majors should contact Natural and Social Sciences (NSS) Advisement Center
King Hall (KH) D-1051
(323) 343-5284
http://web.calstatela.edu/academic/nssd/AdvisementCenter/StudentServices.php

**Important:**

A "Math Department Advisement for Q2S" 2015-2016 Moodle site has been created for all Q2S transitional students. All pertinent information including quarter and semester program sheets, roadmaps, course offering schedules, instructions for how to create IAPs along with samples etc. are posted for students' perusal. All Q2S transitional students are advised to complete the preliminary IAP assignment before seeking an IAP (Individualized Advisement Plan) appointment with Dr. Raychaudhuri in Fall 2015.