**Syllabus Math 078/178 Calculus for Business, Social, and Behavioral Sciences**

### Cuyamaca College: Fall 2018 Instructor: Chris Navo Section: 9994 Units: 6

**Email:** **Chris.Navo@gcccd.edu** **Classroom Location: H-139**

**Dates Classes Meet: January 28-May 30**

**Days & Times classes Meet: Tuesdays and Thursdays Math 078 6:00-6:50pm and Math 178 7:00-8:50pm**

**Student Hours: Room H-112 Mondays Tuesdays & Thursdays 4:30-5:45 pm**

 **& Wednesdays 12:35 -1:50. pm**

**Course Description**

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| **Math 078** | **Math 178** |
| **Intermediate Algebra for Math 178** | **Calculus for Business, Social and Behavioral Sciences** |
| A review of the core prerequisite skills, competencies, and concepts needed in business calculus. Intended for majors in science, technology, engineering, and mathematics who are concurrently enrolled in MATH 178, Calculus for Business, Social and Behavioral Sciences at Cuyamaca College. Topics include: a review of computational skills developed in intermediate algebra, factoring, operations on rational and radical expressions, linear, exponential and logarithmic expressions and equations, an introduction to matrices, functions including composition and inverses, and an in-depth focus on quadratic functions. This course is appropriate for students who are confident in their graphing and beginning algebra skills. A graphing calculator is required for this course. Not open to students with credit in MATH 180. **Pass/No Pass only. Non-degree applicable.** | Presents a study of the techniques of calculus with emphasis placed on the application of these concepts to business and management related problems. The applications of derivatives and integrals of functions including polynomials, rational, exponential and logarithmic functions are studied. Not open to students with credit in MATH 180. |

**PREREQUISITES****For Math 178 “**C” grade or higher or “Pass” in MATH 110 or equivalent (MATH 103 does not meet the prerequisite)**For Math 078** Appropriate placement |

# STUDENT LEARNING OUTCOMES

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| ***Upon successful completion of this course, students will be able to:******1. Apply derivatives to solve application problems from business or the natural or social sciences.******2. Use graphical, numerical or analytical methods to solve real-world problems from business or the natural or social sciences.******3. Use integration in business and economics applications.***  |

# REQUIRED TEXT & SUPPLIES

All that I require is for access to Webassign.com, and a graphing calculator which will be used during some of the Group Work Activities. I do highly recommend the hardback or copy of the textbook for easy reference, but do not require it. Listed below you will find the information needed to setup Webassign for this class. Pay attention to due dates. Late homework is accepted at a reduce grade.

##### **Instructor: Chris Navo Math 178 section 9994 class key: MiraCosta 6632 0634**

(yes, there are spaces, and it says MiraCosta because I was an instructor there as well, Cuyamaca’s name soon). Beresford Rocket, Applied Calculus 6thedtion e-book comes with Webassign.com

 **Calculator:** A graphing calculator is required. I will be using Ti-84 in class. Bring your student id to check out calculators from the STEM center. You can check out a calculator from the STEM center.

Notebook paper, graph paper and a binder are required**.** Pencil, big eraser, highlighter, ruler, and color pencils/pens are optional**.**  Calculators cannotbe shared on exams, so please bring your own calculator

**Homework:** Homework will be done online using **Webassign.com,** and is worth 20% of your grade in this course. **Pay attention to deadline dates**. Webassign comes with an electronic version of the book. A hardback version of the book is not required; however, I do require access to Webassign.com to do the homework, and keep in mind as well that some of the quizzes could come from previous homework. Therefore, it is important to stay in sync and up to date with the homework for whatever sections we have covered from class. Homework will be due the night before each exam which includes the material we are covering for that exam only.

### Group Work Activities: Throughout the semester I will assign Group Work Activities. You are to work together on the Group Activity and turn in one paper for the group. The points for each assignment will be different depending on the difficulty of the assignment. In addition to the homework, the activities will also help you prepare for the exams.

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### Exams: Expect Five (5) exams, and a final exam that will be cumulative on the last day of our class during finals week. Each exam will be done in class. There are no makeups for exams because I will drop your lowest exam score at the end of the semester (this is the one you should save for a rainy day), but if you talk with me in advance or you have an emergency, send me an email immediately, and depending upon the nature of the situation I may allow you to make up the exam. You will be allowed to use a graphing calculator on exams and during group work. Cell phones have been misused during exams, so unfortunately cell phones may no longer be used or any electronic device that has Wi-Fi capabilities The exams will consist of problems like our class discussions and the homework assignments as well as “concept” problems that require you to “synthesize” the material learned and relate it to the topics covered..

###  Grade Categories Weight

* + Exam 1: Chapter: 1.1-2.2
	+ Exam 2: Chapters: 2.2-2.7 Average Best 4 out 5
	+ Exam 3: Chapters: 3.1-3,6 Skip 3,5 40%
	+ Exam 4: Chapters: 4.1-44
	+ Exam 5: Chapters: 7.1, 7.2 5.1-5.6 Skip 5.5
	+ Homework Webassign.com 15 %
	+ Writing assignments 5 %
	+ Group Work Activities 20%
	+ Final Examination 20 %

100%

Plus/Minus grading system will be used for final grades: A+ (97-100%); A (94-96%): A- (90-93%);

B+ (87-89%); B (84-86%); B (80% - 83%); C+ (77% - 79.9%); C (70-76%); D (60% - 69%); F (below 60%).

Any students seeking an "I" (incomplete) for a grade must file a petition with me citing "unforeseeable, emergency, and justifiable" reasons for this grade.

# This syllabus is subject to change at any time with prior notice.



**Tutoring:**

### If you feel you need more help than I or other classmates can offer there is free tutoring available in the STEM Achievement Center. You can sign up for a ½ hour sessions with a tutor there. Make sure to have all your materials and questions ready for the tutor as to make best use of your time. There is also free there online tutoring that you can access for our class on Canvas under the “Tools” section. Watch youtube.com videos and read the power points on Canvas. See me during student hours for help on any questions you may have.

### Additional Support:

You have a Canvas account for Math 178 with links to the syllabus and all handouts. In addition, I encourage you to have discussions within Canvas for collaborating with each other. You can access Canvas through the school homepage at [https://www.cuyamaca.edu](https://www.cuyamaca.edu/) The Canvas link is at the top of the page.

**Classroom Etiquette:**

1. To help promote the best learning environment, please keep cell phones turned off during class time, and try to stay positive about the subject matter unlike the girl in the picture above. Cell phones are not allowed for calculators for exams. Any device that allows students to communicate or access the internet is not allowed during exams. If caught using a cell phone during an exam, you will be given a 0 on that exam. In addition, using notes when not allowed or using unauthorized notes during an exam, copying another student’s work, getting test information from another student in another class is obviously cheating. If you are caught cheating, you will receive an F (Zero Points) on that test, and I must report the incident to the Student Affairs Office.
2. Math is not a spectator’s sport. A student *may* be dropped for four or more absences but the student is ultimately responsible for officially withdrawing from the course. If absences become a problem, please come and speak with me.
3. If you miss class, you must email the instructor to inform him/her of the absence.
4. You are responsible for getting class notes and any schedule changes or other announcements on days missed from the class. Any changes and announcements will be posted on Canvas or sent via email.
5. You are expected to attend each class, arriving on time and remain for the entire class. If this is not possible it is your responsibility to discuss with the instructor the reasons for arriving late or leaving early. *Please let me know at the beginning of class if you will need to leave early*.
6. You are expected to be courteous to each other and to the instructor. The community college experience is one in which you will be exposed to many diverse individuals. Your success in this world depends on how well you can work in groups as well as individually with other people. Respect each other and your instructor. I am here to help you, not make your life a living hell. Ones attitude about a subject has a huge impact on how they learn that subject. You will be asked to leave the class for display of behavior I feel is disruptive to the class environment.
7. Find a study partner, and/or form groups to help prepare for exams.
8. During group activities be expected to collaborate actively with your peers, sharing, taking and giving, listening and explaining, questioning and answering. You should be prepared for participation in class discussions and in group work. Assist your peers to come to an understanding of mathematics.
9. You may have drinks in class only if the drink is in a container that can be closed tightly and is not likely to spill if dropped. I encourage you to use your own reusable drink container for class. No food is allowed during class time. You may have food with you to snack on in the classroom during breaks, but I do not want the distraction of food during class Be aware that NO drinks or food are allowed in any computer lab and upstairs in Science labs. In addition, only water is allowed in the STEM Achievement Center.
10. Stay positive and focused,, don’t be the girl in the above picture.

**SUCCESS TIPS FOR LEARNING MATHEMATICS**

* Read ahead in the text the sections(s) to be covered in class on a particular day.
* Take notes on the lecture and attempt to understand “why” as well as “how” problems are solved. Ask questions during the lecture on points you do not understand.
* Complete homework assignments before the next class. If time does not allow you to complete the assignment, at least try some of the problems and ask questions about the ones you don’t understand.
* Begin reviewing and studying for a test at least one week before the scheduled test date.
* Do not attempt to learn math by yourself. Team up with another classmate and work together. Share ideas and help each other understand the material. Ask your instructor questions during office hours.
* To support your efforts to succeed in this class, it is highly recommended that you utilize the free math tutoring services available in the STEM Tutoring Center. Call 660-4396 for more information. The tutoring hours are scheduled as follows: Monday: 9:00am – 7:00pm Tues: 9:00am – 7:00pm Wed: 9:00am – 7:00pm
* Thurs: 9:00am – 7:00pm Fri: 9:00am – Noon: This is the Aftermath Workshop

**ACADEMIC ACCOMMODATIONS**

Academic accommodations are available for students with disabilities. Please identify yourself to your instructor and/or to Disabled Students Programs and Services (DSP&S) staff so that the appropriate accommodations can be ensured.

**SPRING 2018 ACADEMIC CALENDAR**

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| Last Day to Drop without "W" (semester length classes) | February 9 |
| Last Day to Apply for [Refund](https://www.cuyamaca.edu/services/cashier/refunds.aspx) (semester length classes) | February 9 |
| Census Day (semester length classes) | February 12 |
| Holiday (Lincoln's Birthday Observed) | February 16 & 17\*(Friday & Saturday) |
| Holiday (Washington's Birthday Observed) | February 19\* |
| Last Day to [Apply for P/NP](https://www.cuyamaca.edu/services/admissions/forms.aspx#pnp) (semester length classes) | March 2 |
| Last Day to [Apply for Spring 2018 Degree/Certificate](https://www.cuyamaca.edu/services/admissions/graduation.aspx) | March 9 |
| End of First 8-Week Session | March 24 |
| Spring Recess | March 26 - March 31 |
| Spring Holiday | March 30 & March 31\*(Friday & Saturday) |
| Second 8 - Week Session Begins | April 2 |
| Last Day to Drop Semester Length Classes | April 27 |
| End of Second 8-Week Session | May 26 |
| Holiday (Memorial Day) | May 28\* |
| [Final Examinations](https://www.cuyamaca.edu/current-students/schedules/files/2018/spring/schedule-spring-2018-finals.pdf) | May 29 - June 4 |

## **Class Schedule**

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| **Day** | **Date** | **Sections** |
| **Tuesday** | **1/29**  | **1.1, 1.2** |
| **Thursday** | **1/31** | **1.3, 1.4** |
| **Tuesday** | **2/5**  | **1.4 catch up** |
| **Thursday** | **2/7** | **2.1, 2.2** |
| **Tuesday** | **2/12** | **Review** |
| **Thursday** |  **2/14** | **Exam 1** |
| **Tuesday** | **2/19** | **2.3, 2.4** |
| **Thursday** | **2/21** | **2.5, 2.6** |
| **Tuesday** | **2/26** | **2.7, Review** |
| **Thursday** | **2/28** | **Review** |
| **Tuesday** | **3/5** | **Exam 2 on Sections 2.2-2.7** |
| **Thursday** | **3/7** | **3.1, 3.2** |
| **Tuesday** | **3/12** | **3.3, 3.4** |
| **Thursday** | **3/14** | **3.6, Review** |
| **Tuesday** | **3/19** | **Review** |
| **Thursday** | **3/21** | **Exam 3 on Sections 3.1-3.6** **(skip 3.5)** |
| **Spring Break** | **3/25-3/29** | **No Classes** |
| **Tuesday** | **4/2** | **4.1, 4.2** |
| **Thursday** | **4/4** | **4.3, 4.4** |
| **Tuesday** | **4/9** | **Review** |
| **Thursday** | **4/11** | **Exam 4 on Sections 4.1-4.4** |
| **Tuesday** | **4/16** | **7.1** |
| **Thursday** | **4/18** | **7.2** |
| **Tuesday** | **4/23** | **5.1** |
| **Thursday** | **4/25** | **5.2** |
| **Tuesday** | **4/30** | **5.3** |
| **Thursday** | **5/2** | **5.4** |
| **Tuesday** | **5/7** | **5.6** |
| **Thursday** | **5/9** | **Review** |
| **Tuesday** | **5/14** | **Exam 5 on Sections 7.1-7.2 and 5.1-5.6 (skip 5.5)** |
| **Thursday** | **5/16** | **Review** |
| **Tuesday****Thursday** | **5/21****5/23** | **Review****Review** |
| **Tuesday** | **5/28** | **Final Exam 6:45-8:45** |
| **Thursday** | **5/30** | **Final Exam 7:15-9:15 pm** |

# This

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##  **Cuyamaca College: A Contract for Success**

Please carefully read the following and be prepared to sign on the first day of class indicating that you have read and understood each of the bulleted statements.

* I understand that we will NOT study every topic from arithmetic, pre-algebra, and beginning algebra in Math 078. Rather, as necessary we will study only those topics that are needed to understand Math 178, Business Calculus.
* In the Math 178+078 combo course, I understand that I will use writing skills to explore many questions and topics prerequisite to understanding Business Calculus, and that I will be required to write during every class and to successfully complete my homework assignments.
* I understand that if I drop (or the instructor drops me) from either course, I will be dropped from the remaining concurrent-enrollment course in the course combo.
* I understand that my instructor will approach the Math 178+078 combo course as one class. Therefore, my grade in Math 078 is determined by the grade I earn in Math 178.
* Since Math 178 meets the degree requirements at Cuyamaca College and transfers to the four-year institutions, if I am successful in the Math 178+078 combo (earning a grade of C or higher in Math 178), I understand that I will have completed the math requirements for my two-year degree at Cuyamaca College and/or a four-year degree at many universities (depending on the school and my major).
* I understand that we will NOT study every topic in Algebra, and that Algebra is a pre-requisite for Math 78 178.
* I understand that it is my responsibility to drop the course not the instructors.
* I understand any late policies about due dates, exams, and the grading procedure for the course as well.
* I will abide by the class policies and procedures for the course.
* I understand that taking an exam late is not acceptable.
* I understand that my grade in the course is final, and that the instructor will not give me a passing grade because he is a nice guy.
* I will not beg my teacher to change my grade so that I can transfer or graduate, that is I understand that my grade is ultimately my responsibility and will not try to guilt the instructor into raising my grade.
* I understand that if I have a hard time with eye movement during an exam that I must sit in the front row for exams.
* If the instructor sees my eyes looking at another student’s exam or sharing any information either giving or receiving that I will get a 0 on that exam, and a report form will be filled out with the school for possible disciplinary action.
* I understand that I need to do homework every day in this course for a minimum of 3 hours after each class, and that copying the solution manual or another student’s homework will be considered cheating as well and will be given a 0 on that assignment. In addition, I know that any written homework assignment, needs to be written up in my own words.
* I understand that it is my responsibility to pay attention to deadline dates set on Webassign.com specifying when homework is due and that I have 1 week after the assignment to turn in late homework for partial credit.
* I will show respect to everyone inside of class and outside of class as well, regardless of any gender, sexual orientation, cultural, religious, ethnic, age, or difference of opinion.
* On exams, I will only ask if the instructor if he/she can reword the question on the exam if I don’t understand the wording
* I will not try to deflect the teacher’s attention during an exam for any reason by standing in front of him/her to block eyes the with the rest of the class, or
* I will bring my material to class with me each day I will not ask the instructor how to solve a problem or give hints.

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By signing my name below, I acknowledge that I have read and understand
the CONTRACT FOR SUCCESS and class policies on the revise side.

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By signing my name below, I acknowledge that I have read and understand