

GROSSMONT COLLEGE
Math 176: Precalculus: Functions & Graphs
Spring 2019 Syllabus

Class Meets: MTWTh: 3:00-4:20 PM, Bldg 36, Room 353 (Section #8479, 6 units)

Instructor: Michael T. Orr

Contact Info: Office Hours: (Tentative)

MW 2:30 – 2:50 PM in MSC

TTh 1:45 – 2:50 PM

Others by appointment.

E-mail Address: Michael.Orr@gcccd.edu

Phone/Voice Mail: (619) 322-5993

Web Address: www.grossmont.edu/people/michael-orr

Homework Website: <https://www.webassign.net>

Web Assign Class Key: **gcccd 1360 9989**

Overview: This course is the unification of college algebra and analytical trigonometry. Topics include the theory of functions (polynomial, exponential, logarithmic, trigonometric and their inverses), trig graphs, identities and equations, matrices, conic sections, polar graphing, parametric equations, binomial theorem, mathematical induction, sequences and series. Pre-calculus topics will be stressed. This course will satisfy the prerequisite for Calculus I at Grossmont College.

A Student Who Has Successfully Completed This Course Will Be Able To:

- A student will be able to categorize precalculus problems and use appropriate theorems, formulas, and algorithms to solve them.
- A student will be able to use the appropriate technology to solve problems requiring precalculus.
- A student will be able to formulate, analyze, and differentiate mathematical functions numerically, graphically, and symbolically at the precalculus level and have the ability to transition between these representations.
- A student will be able to communicate the mathematical process and assess the validity of the solution.

Prerequisite: A “C” grade or higher in Math 103, Math 110, or equivalent and Math 097 (Geometry) or equivalent is required. (Note: Math 103 is not equivalent to Math 110.) You are responsible for knowing all Intermediate Algebra and basic Geometry topics.

Text: *Precalculus: Mathematics for Calculus*, 7th Edition by James Stewart, Redlin, Watson.

A Web Assign access code is required.

Textbook + Enhanced Web Assign + eBook: ISBN: 9781305071759

Enhanced Web Assign + eBook: ISBN: 9781285858333



If you are purchasing this textbook, make sure that it comes with Enhanced Web Assign Access Kit/Code.

Web Assign Access Code:

I will be using WebAssign (WA) for homework, some quizzes, and other course material. **The access code is FREE with the purchase of a NEW textbook.** However, if you decide not to buy the textbook, then you will have to purchase the access code separately so that you can gain access to the course materials. The Grossmont College bookstore bundled your textbook with Enhanced Web Assign. If you go elsewhere for your book, then make sure it comes with WebAssign.

If you decide to only purchase the WebAssign access code without the textbook, it will cost you \$100 online at www.webassign.net Your WebAssign access code is also available at our campus bookstore (but probably at a marked up price). When you register online, there is a subscription available for \$120 per semester that gives you access to all the course materials for all your courses that use Web Assign (Chemistry, Physics, etc).

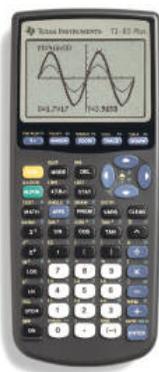
When you register onto WebAssign, you will have access to the online version of the textbook. If you prefer an e-book instead of a traditional textbook, then this option is best for you. Your WebAssign account is valid for this semester only.

Warning: Before opening your WebAssign access kit, make sure that this course is the right course for you. Once the WebAssign Student Access Kit is opened to where the access code is revealed, it is nonrefundable!

Graphing Calculator:

The TI- 84 calculator is REQUIRED for this course. The TI-83 or TI- 83 plus may also be used as they operate using the same instructions as the TI-84 (with a few exceptions). You will learn how to use this calculator by using the tutorials within EWA and by attending lecture. **It is your responsibility to bring your calculator to all class meetings.** Students may not share calculators during exams or quizzes. **Be aware that there may be portions of exams/quizzes where calculators CAN'T be used.** If you purchase another type of calculator, something other than the TI-83, TI- 83 plus or TI- 84, you will not get instructor help with its operation.

The TI-89, TI-92, TI-Voyage200 (or equivalent), TI-Nspire CAS can NOT be used during exams or quizzes.



TI- 83



TI -84

If you do not wish to purchase a graphing calculator, you can rent one from web sites like www.rentcalculators.org for \$9 to \$12 per month (plus shipping charges) or you can check one out from the Grossmont College Library.

SUMMARY OF COURSE MATERIALS NEEDED:

- 1) Web Assign access code (**REQUIRED**) comes with e-book Access.
- 2) TI-83 OR TI-84 Graphing Calculator (**REQUIRED**)
- 3) Textbook: Precalculus: Mathematics for Calculus 7^E by James Stewart (**RECOMMENDED** for students who need a traditional textbook)

Grading: Your grade for the course is based on:

• Homework	10%
• Quizzes/Labs	15%
• 5 Exams (10% each)	50%
• <u>Final Exam (cumulative)</u>	<u>25%</u>
TOTAL	100%

The grading scale for this course is:

90 – 100 % = **A**, 80 – 89 % = **B**, 70 – 79 % = **C**, 60 – 69 % = **D**, Below 60 % = **F**

For Credit/No Credit option: 70 – 100 % = **Credit**, Below 70% = **No Credit**

You can NOT get a passing grade in this class without taking the final exam!

Homework/ You will be assigned homework in *WebAssign* and lab assignments on the computer.
Comp. Lab: Math is a subject learned by doing. Therefore doing your homework is very important to succeed in this class. Homework will be assigned daily. **I expect you to attempt all assigned exercises before the next class meeting.** I will answer your questions at the beginning of each class. All homework will be done online and you have an unlimited number of attempts for each assignment. Each assignment, however, must be submitted BEFORE its due date. Do not wait until the due date to submit an assignment, I will guarantee you that something will go wrong. Remember that technology can be unreliable and at the most inconvenient time, PLAN AHEAD and submit your homework one day before it is due to avoid problems. You must at least attempt a homework assignment to have access to it from the grade book. **If you do not attempt a homework assignment then you will not have access to it later when you are preparing for a test.** To submit and save your homework you need to click on the SAVE button at the bottom of the page. Even if you are not ready to submit, you should always save your homework so that I have your most updated results.

A successful student seeks out help when needed. Don't wait until it's too late to get help. Go to the math study center, make an appointment for one-on-one tutoring, stop by my office during office hours. We are all here to help you succeed. Utilize these services so that you can maximize your chances of earning a good grade in this class.

Notice that the computer program gives specific instructions on how the answer is to be entered. Make sure to read the small print so that you are rounding correctly. When entering your answer make sure to use the symbols in the palette located to the left of your screen. If you are not using the symbols in the palette then your answer will be marked incorrect. Follow all instructions so that your answer matches the correct answer in the computer program.

Everyone should get a perfect score on each homework assignment. You have an unlimited number of attempts for each problem and you are guided every step of the way. Because of this, your score on a homework assignment may not be representative of how well you understand the material. If you are using the help tools with homework problems, try to do them over, on your own, at a later time with no help to see how much you really understand.

Quizzes: **Weekly quizzes will be given in this course.** Quizzes will be both in class on paper and in WebAssign. The purpose of these quizzes is to prepare you for upcoming exams. Quizzes measure what you have learned after completing the homework and is indicative of how well you will do on exams.

I will be giving you take home quizzes and POP quizzes. Expect a POP quiz at every class meeting. Take home quizzes are available online through MyStatLab. It is important that you attend every class meeting so that you do not miss a quiz. If a pop quiz is given during the first

5 or 10 minutes of class and you are late, you will not be able to take this quiz. If a pop quiz is given during the last 10 minutes of class, you will not be able to take this quiz earlier. **Make-up quizzes will NOT be given.** Two pop quizzes will be dropped at the end of the semester to compensate for missing a quiz caused by events beyond your control. An online (take home) quiz may be turned in early for credit if the due date is inconvenient for you.

Take home (online) quizzes are similar to the homework questions. I will take the best score out of three attempts (to compensate for technology unreliability, I have set the attempts to 5 on WebAssign but I only guarantee 3 attempts). **Late quizzes will not be accepted so plan ahead** To avoid problems submit your quiz one day before it is due - do not wait until the due date. Always print out or save a confirmation of your quiz results. In case of computer malfunction, this is proof that you completed the assignment. Turn in your confirmation only if you see that you did not receive credit for your assignment.

Exams: There will be 5 exams and a cumulative Final Exam. **No exams will be dropped** and there are **no retakes.** Exams will cover material from the homework, textbook and handouts, as well as material presented in class.

If you do not take an exam, you will receive a ZERO for it.

Make-up exams may ONLY be taken by PRIOR ARRANGEMENT or in the case of a DOCUMENTED emergency and only if you contact me before the exam day.

Remember that it is **your responsibility** to contact me (by email, phone, mailbox, or in person) **immediately** if a conflict arises.

No books and absolutely no cell phones (or other electronic devices) will be allowed on exams.

Final Exam: The final is **MANDATORY** and **CUMULATIVE** and will be given

Monday, June 3rd, 3:55 – 5:55 PM, Room 36-353

DON'T MAKE TRAVEL PLANS THAT CONFLICT WITH THIS DATE !!!!!

Attendance: Attendance is required at each class meeting. Bring your text and calculator to every class. When absences exceed the number of hours that a class meets a week, the instructor may drop the student from the class (**You can be dropped from the class for having more than 2 unexcused absences**). It is the student's responsibility to discuss anticipated extensive absences with the instructor. Partial absences (late arrivals, long breaks, early exits, etc) will constitute a ½ day absence. Make-up work for an absence of any kind must be completed to the satisfaction of the instructor. No absence relieves the student of the responsibility of completing all work assigned. Please discuss any anticipated absences with me as soon as possible. In the event of an absence, you are responsible for all material covered in class, turning all assignments in **on time** and any schedule changes or class announcements

**Supervised/
Tutoring:** Students requiring additional help or resources to achieve the stated learning objectives of the courses taken in a Mathematics course are referred to enroll in Math 198, Supervised Tutoring. The department will provide Add Codes.

Students are referred to enroll in the following supervised tutoring courses if the service indicated will assist them in achieving or reinforcing the learning objectives of this course:

- **IDS 198**, Supervised Tutoring to receive tutoring in general computer applications in the Tech Mall;
- **English 198W**, Supervised Tutoring for assistance in the English Writing Center (70-119); and/or
- **IDS 198T**, Supervised Tutoring to receive one-on-one tutoring in academic subjects in the Tutoring Center (70-229, 644-7387).

To add any of these courses, students may obtain Add Codes at the Information/Registration Desk in the Tech Mall. All Supervised Tutoring courses are non-credit/non-fee. However, when a student registers for a supervised tutoring course, and has no other classes, the student will be charged the usual health fee.

**Classroom
Conduct:**

You are expected to be courteous to each other and to the instructor. Your demeanor should support and respect the environment of learning inside the classroom. Inappropriate behavior will not be tolerated. A student may be excluded from class whenever the student exhibits behavior which interferes with the educational process. The instructor will determine when behavior is disturbing and appropriate action will follow. You are responsible for reading and adhering to the rules described in the "Student Conduct" section of the Grossmont College General Catalog.

Use of a cell phone or other non-approved electronic device is not allowed in class. During class, all phones, music players, and other distracting electronic devices must be turned off or put in silent mode AND put away. Any student caught using a cell phone (calls, texting, or any other use) in class will be asked to leave class for that day and no makeups will be allowed for quizzes or exams missed as a result. In times of family crisis, you may set your cell phone on vibrate. Surfing the Internet during lecture is also strictly prohibited.

Movement and chitchat in the classroom disrupts your classmates and the instructor. This includes leaving class, coming in late, passing notes and chatting with the person next to you about non-math related topics. Because of the size of this class it is very important that all students be respectful of those trying to learn. Again, I encourage you to ask questions in class. Just know that if you have a question related to the class, someone else is certain to be wondering the same thing; So please ask!

Visitors may be allowed into the classroom only with the instructor's prior approval. If you bring food or beverages into the classroom, please clean up after yourself. If you must arrive late or leave early, take the first seat near the door.

PERFUMES, COLOGNES, STRONG DEODORANTS, BODY SPRAYS:

Multiple Chemical Sensitivity (MCS) is a disorder triggered by exposure to chemicals in the environment. Exposure can occur through the air, food, water, or skin contact. Like allergies, symptoms tend to come and go with various exposures, although some people's reactions may be delayed.

Symptoms typically occur in more than one organ system in the body, such as the nervous system and the lungs. MCS typically impairs many bodily functions including the nervous system and digestion. MCS also affects the overall health and well-being of those with the disorder. Each individual affected by MCS has a unique set of health problems. Some symptoms of MCS that could impact performance in courses and other college activities include headaches, asthma or breathing problems, memory loss, fatigue, and depression.

As such, **PLEASE REFRAIN FROM WEARING ANY PERFUME, COLOGNE, STRONG DEODORANTS, AND/OR BODY SPRAYS.** If you are wearing any of these in class, you may be asked to leave the classroom.

At Grossmont College and in this class, we promote acceptance of all people, including those of diverse age, ancestry, color, disability, ethnicity, perspective, national origin, religion, gender, gender identity, sexual orientation, education, or socioeconomic status.

Derogatory comments about another's race, ethnicity, accent, appearance, intelligence, or sexual orientation will not be tolerated on any level.

Please see the Grossmont College Catalog for a full statement of the Student Code of Conduct.

Academic Integrity:

Cheating and plagiarism (using one's own ideas, writings or materials of someone else without acknowledgement or permission) can result in any one of a variety of 8 sanctions. Such penalties may range from an adjusted grade on the particular exam, paper, project, or assignment (all of which may lead to a failing grade in the course) to, under certain conditions, suspension or expulsion from a class, program or the college. Class assignments, exams, and quizzes that are missed during a suspension are not eligible for make-up. IN addition, suspended days are counted as absences. For further clarification and information on these issues, please consult with your instructor or contact the office of the Assistant Dean of Student Affairs.

CHEATING is the copying of any test or quiz question or problem, or work done in a class that is not the student's own work. It also includes giving or receiving unauthorized assistance during an examination whether it was intentional or not. Obtaining or distributing unauthorized information about an exam before it is given is also cheating, as is using inappropriate or unallowable sources of information during an exam. To avoid unintentional copying of work, students should cover their own exams and quizzes, and not leave a test or quiz on the desk where another student may be tempted to look at it.

Students w/ Disabilities:

Students with disabilities who may need accommodations in this class are encouraged to notify me and contact Accessibility Resource Center (A.R.C) **early in the semester** so that reasonable accommodations may be implemented as soon as possible. Students may contact A.R.C. in person (Bldg 60, Room 120) or by phone (619) 644-7112 (voice) or (877) 561-8975 (Video Phone for the deaf).

Expectations:

Enrolling in a course represents a commitment to attend class and to participate fully in the learning process. I expect students to come to every class **on time**, prepared for that day's lecture. I expect students to be attentive during lectures, to take notes, and to remain seated until class is over. I expect students with questions about the material to ask them before, during and after class. I expect students to put in the effort required to succeed in this course!

*****MAXIMUM NUMBER OF TIMES A STUDENT MAY ENROLL IN A COURSE*****

The maximum number of times a student may enroll in the same credit course is **three times**.

- A student, through a combination of substandard grades (D or F) and withdrawals (W) on their student record, may only take a class three times.
- If a student, through a combination of substandard grades (D or F) and withdrawals (W), wishes to take a class for the fourth time, they must submit a petition to the Admissions and Records Office. Petitions will only be approved based on extenuating circumstances.
- Military Withdrawals do not count in terms of repetition restrictions, nor do withdrawals that occur due to fire, flood (Title 5 Sections 55024 and 58509)
- This rule does not contain a grandfather clause. If a student has already reached the maximum allotted number of course repetitions, the district will not be able to claim apportionment for that course.

TIPS FOR SUCCESS:

1. Get to class on time, every day.
2. Listen attentively to the lectures and take careful notes.
3. Asks questions in class when you don't understand.
4. Do the homework! Attempt ALL OF IT!
5. Make a math friend in class. Work in pairs or organize your own study group.
6. Get FREE tutoring – the Math Study Center is in Rooms 70-112.

Hours:	Monday – Thursday	8:30 am – 9:00 pm
	Friday	8:30 am – 3:00 pm
	Saturday	closed

7. Feel free to come to me with questions about concepts or problems you don't understand.
8. Keep a positive attitude!

Important Dates:

February 8:	Last day to drop without a “W” (and for refund)
February 15-18:	Holidays (Lincoln's & Washington's Birthday's - Observed)
Mar 1:	Last Day to apply for P/NP option.
Mar 25-31:	Spring Break – NO CLASS
April 26:	Last day to drop classes with a “W”
May 27:	Holiday – Memorial Day
Jun 3:	Final Exam @ 3:55 – 5:55 PM, Room 36-353

Finally, by enrolling in this class you agree to all of the terms and conditions listed on this syllabus. Enjoy the class and if you have any questions regarding the nature of this course feel free to contact me.

This course adheres to the policies outlined in the Grossmont College Catalog. See the Academic Policies stated in the catalog.

INSTRUCTOR:
Orr

Math 176 Tentative Schedule
Spring 2019

Section #: 8479

Week	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1 1/28– 2/1	Introduction 2.1	2.1, 2.2	2.2, 2.3	2.3, 2.4	
Week 2 2/4 – 2/8	2.4, 2.5	2.6	2.7	2.8	Last Day to Drop w/out W
Week 3 2/11– 2/15	Review	Ch 2 Exam	3.1	3.2	Holiday Lincoln’s Birthday
Week 4 2/18– 2/22	Holiday Washington’s Birthday	3.3, 3.4	3.4, 3.5	3.6	
Week 5 2/25 – 3/1	3.7	4.1, 4.2	4.3, 4.4	4.5	
Week 6 3/4 – 3/8	4.6	5.1	Review	Ch 3 & 4 Exam	
Week 7 3/11 – 3/15	5.2	5.3	5.4, 5.5	5.5, 6.1	
Week 8 3/18– 3/23	6.1, 6.2	6.2, 6.3	6.4, 6.5	6.5	
3/25- 3/30 Spring Break					
Week 9 4/1– 4/5	6.6	7.1	Review	Ch 5 & 6 Exam	
Week 10 4/8 – 4/12	7.2, 7.3	7.4, 7.5	7.5	8.1	
Week 11 4/15 – 4/19	8.2	8.3	8.4	Review	
Week 12 4/22 – 4/26	Ch 7 & 8 Exam	9.1	9.2	10.3 (10.1, 10.2 Review)	Last Day to Drop
Week 13 4/29 – 5/3		10.4	10.5	10.6	
Week 14 5/6 – 5/10	10.7	10.8, 10.9	11.1, 11.2	11.3, 11.4	
Week 15 5/13– 5/17	12.1	Review	Ch 9, 10, & 11 Exam	12.2, 12.3	
Week 16 5/20 – 5/24	12.5	12.6	Review for Final Exam	Review for Final Exam	
Week 17 5/27 – 5/31	Holiday Memorial Day				
Week 18 6/3 – 6/7	FINAL EXAM 3:55 – 5:55 PM				