MAT220 Calculus with Analytic Geometry I

Summer 2024 Syllabus

Sect	tion	Format	Credit Hours	Dates	Time	Days	Room
141	171	Hybrid*	5	Jun 3 – Jul 18, 2024	12:00PM – 2:10PM	MW	CM-467

^{*}HYBRID CLASS: Blends classroom and online instruction.

Professor Jenifer Bohart

Email: <u>Jenifer.Bohart@scottsdalecc.edu</u> Office Phone and Voicemail: (480) 423-6278

Office: CM-423

The information contained in this syllabus is subject to change at any time during the semester by the instructor. Any changes will be announced through the email you use to create your MOER account.

NOTE: Canvas will not be used for this class.

Required Items

MOER Account

TI-83 or TI-84 Graphing Calculator

- A TI-83 or TI-84 graphing calculator is **required** for this class.
- The <u>SCC Media Center</u> will rent calculators for the semester. There are a limited number of calculators available.
- Calculators that perform symbolic manipulation will **not** be permitted: examples include the TI-89, TI-92, TI-Inspire, HP-48, HP-48G, and Casio 9970.
- NOTE: If you are considering buying another brand of graphing calculator, such as the Casio or
 HP, please keep in mind that, although these calculators may have the same features as the
 TI-83 and TI-84, the interface will be different. This will make it much harder for you to follow
 along with the online video tutorials, all of which use the TI.

Course Textbook

- We will use an open text for this course which can be viewed/downloaded for free.
- Students are NOT required to print or purchase a hard copy of the textbook.

Technical Requirements

- A working email address that you check regularly.
- Reliable, high-speed Internet connection
- Headphones or working speakers connected to the computer
- Webcam (internal or external) and microphone

You will also need...

- A 3-Ring Binder to hold notes and class handouts
- Pencils with erasers
- Colored pencils/pens and highlighters
- Notebook paper and/or graph paper.

Course Technologies

View the Accessibility Statements & Privacy Policies of technologies used in this course.

This course uses key Maricopa systems for course management and communication.

- Student Maricopa Gmail Account
- Maricopa Open Educational Resource Learning System (MOER)

Streaming Media/Audio/Video Tools

- This course delivers video lectures through YouTube.
- Instructor's virtual office hours will be conducted through Google Meet.

Computer Access and Email

- You will need regular access to a computer (with Internet access) in order to complete the online assignments that are part of this course.
- You are responsible for completing all assignments on time regardless of any computer or internet issues that may occur.
- You will need a working email address that you CHECK REGULARLY. I do send regular class
 announcements and information via the email you use to create your MOER account. It is your
 responsibility to provide a valid email address that you keep up with so that you can receive
 notifications of class announcements.
- **Response Time:** Students can expect a response time of 24 hours for the instructor to respond to messages sent through MOER.

Generative Artificial Intelligence (AI) Policy

The World Economic Forum defines generative AI as "a category of artificial intelligence (AI) algorithms that generate new outputs based on the data they have been trained on. Unlike traditional AI systems that are designed to recognize patterns and make predictions, generative AI creates new content in the form of images, text, audio, and more." Some examples of generative AI tools include but are not limited to: ChatGPT, Google Bard, Microsoft Copilot, Stable Diffusion, GrammarlyGo, and Adobe Firefly.

In this class, all work submitted must be your own. The use of generative AI tools will be considered academic misconduct (see Administrative Regulation 2.3.11 1.B(b)) and will be treated as such. If you are unsure if the tool or website you are using is a generative AI tool, please contact the instructor for further clarification before using the tool or website.

MAT220 / MAT221- MCCCD Official Course Competencies

Prerequisites

Grade of C or better in MAT187, or satisfactory score on District placement exam.

Course Competencies

- 1. Analyze the behavior and continuity of functions using limits.
- 2. State the definition and explain the significance of the derivative.
- 3. Compute the derivative using the definition and associated formulas for differentiation.
- 4. Solve application problems using differentiation.
- 5. State and explain the significance of the Fundamental Theorem of Calculus.
- 6. Compute anti-derivatives, indefinite and definite integrals of elementary functions.
- 7. Read and interpret quantitative information when presented numerically, analytically or graphically.
- 8. Compare alternate solution strategies, including technology.
- 9. Justify and interpret solutions to application problems.
- 10. Communicate process and results in written and verbal formats.

SCC Resources Related to This Class

SCC Math Center:

In-Person <u>and</u> Remote tutoring is available for free through the SCC Math Center. Instructions and hours are on the <u>SCC Math Center website</u>.

Academic & Student Support Services:

A variety of student services can be accessed online. Services are free to all registered SCC students. Refer to the SCC College Resources Home Page.

Accommodations:

Scottsdale Community College provides equal opportunity to qualified students. If you have a documented disability (medical, physical, learning, psychological, etc.) and wish to request disability-related accommodations to complete course requirements, contact Disability Resources & Services (480-423-6517). Course requirements cannot be waived, but reasonable accommodations may be provided based on disability documentation and course objectives.

Course Structure

The topics for this course have been divided into Units which are due on the dates/times indicated in the MOER Calendar. Each Unit consists of an Online Lesson and an Online Test.

Before Class: ONLINE LESSONS

- The Online Lessons serve both as an introduction to the topic and as a resource for how you should aspire to write your solutions and express your mathematical work.
- Take careful notes as you watch the videos in these assignments. The more thorough your notes are, the more helpful they will be to you!
- You will have three tries for each problem in the Lesson assignment. After the third attempt, you can
 generate a new problem for full credit. Refer to your notes from the video tutorials as needed. Work
 problem by problem to achieve a score of 100%. Additional video tutorials are provided in the unit
 folder.
- WRITE DOWN your work as you go through the Lesson assignment. Keep this work neat and in order, and include notes to yourself on difficult problems. You are creating a resource for yourself that will help you as you prepare for quizzes, tests, and exams. The more thorough your notes are, the more helpful they will be to you! Bring this supporting work to class.
- Lessons are due at the beginning of class. Any written problems from the online lessons must be handed in at the beginning of class. These problems will be graded for correctness and quality of work shown. The online lesson assignment will then be reopened after class so you can complete any missed problems.

During Class:

- REQUIRED: Turn all cell phones and other electronic devices OFF before the start of class. Your cell phone may not be used during class.
- IN-CLASS PARTICIPATION AND ASSIGNMENTS
 - You are expected to be on time and prepared for class. Being prepared means having the proper materials with you when you arrive in class (calculator, notes, pencil and paper) as well as all assignments completed.
 - Assignments due at the start of class will not be accepted at any other time during the class period. Have them ready to hand in when you arrive in class.
 - PARTICIPATE in class discussions and activities. This includes group work, board work, and additional assignments given in class.
 - Assignments given in class will be collected and graded, and will not be accepted late.

IN-CLASS QUIZ

- A quiz will be given during each class period. The quiz will consist of material from the current unit.
- You will have 30 minutes to complete the in-class guiz.
- You will be able to use your graphing calculator and written notes for in-class quizzes. Sharing
 of notes or calculators during a quiz is not permitted. You may not use your cell phone or
 computer during class.
- Quiz problems will be graded for correctness and quality of work shown.
- Makeup Quizzes are possible only if you have achieved a score of 80% or higher on the Online Lesson prior to the missed class. All makeup quizzes must be completed in the SCC Testing Center before the next class meeting. You may use your graphing calculator but NO NOTES on makeup quizzes. The SCC Testing Center is by appointment only (no walk-ins) so you will need to schedule your appointment several days in advance. No more than two makeup quizzes will be permitted during the semester.
- o Your lowest in-class quiz score will be dropped at the end of the semester.

After Class: ONLINE TEST

- You may use your calculator and notes on Online Tests, but no other assistance is permitted.
- Online Tests are **timed**. You have one hour to complete the Online Test. Any problems not submitted within this time limit will receive a score of zero.
- Online Tests are due on (or before) the dates indicated on the Course Schedule.
- Late Passes for Online Tests: If you miss a test deadline, you can apply a Late Pass to complete the test for full credit.
 - A Late Pass will extend the test due date by 2 days (48 hours from original due date).
 - Students have 5 Late Passes available to use during the semester.
 - There is no penalty for using a late pass.

Notes to the Student:

- Give yourself plenty of time to complete assignments and get help as needed. Do not wait until
 the last minute!!!
- Read instructions carefully! Work that does not meet specified criteria will lose points and may receive a score of zero. You will not be able to "redo" assignments. Always show your best work and ask questions before an assignment is due.
- All written work must be of collegiate quality: neat, organized, easy to read, and with all possible work shown. Otherwise, it will lose points, and may receive a score of zero.
 (Please use pencil!)

Written Exams

• Two written exams will be given in class. See MOER calendar for exam dates.

Midterm Exam: Covers material from Units 1-6 **Final Exam:** Covers material from Units 7-12

- You may use your graphing calculator but NO NOTES on these exams.
 - If you do not have a calculator, you will have to take the exam without one. Sharing of
 calculators during an exam is not permitted. You may not use your cell phone during class.
 - Calculators that perform symbolic manipulation will **not** be permitted during any exam: examples include the TI-89, TI-92, TI-Inspire, HP-48, HP-48G, and Casio 9970. Your cell phone may not be used as a calculator during an exam.
 - Your calculator program memory will be checked prior to each exam and may be cleared if it contains any programs, notes, or formulas related to exam topics.
- REQUIRED: Turn all cell phones, computers, and other electronic devices OFF before the start of
 every class. Your cell phone may not be used during any class. If you are wearing a "smart" watch,
 you will be asked to remove it before taking a test/exam.
- Exam problems will be graded for correctness and quality of work shown.
- If an emergency arises that is **beyond your control**, you must contact me **on or before** the day of the exam to arrange for a make-up. Make-ups are possible only in special circumstances and at the instructor's discretion. All make-ups for the Midterm Exam, if granted, must be completed *before* the next class meeting. All make-ups for the Final Exam, if granted, must be completed on or before Thursday, August 1, 2024. Make-up exams must be completed in the SCC Testing Center. Failure to adhere to this policy will result in a grade of zero on the exam, and you may be withdrawn from the class.
- Students who miss an exam and do not make it up within the required time period will receive a grade of zero on the exam and may be withdrawn from the class. Both exams must be completed in order to earn a grade (A, B, C, D, or F) for this course.

Grading Summary

Assignment	Percentage of Course Grade	
Online Assignments:	30%	
In-Class Assignments: In-Class Assignments In-Class Quizzes	30%	
Midterm Exam	20%	
Final Exam	20%	

Grading Criteria				
90% - 100%	A			
80% - 89.99%	В			
70% - 79.99%	С			
60% - 69.99%	D (Not passing)			
0% - 59.99%	F (Not passing)			

Final grades are calculated using the scale listed above. FINAL GRADES ARE NON-NEGOTIABLE. It is unethical to reach out at the end of the semester and request "a few extra points" or discuss the consequences of not earning the grade you want in the class. Messages of this nature will not receive a response.

Note: Whether a student receives an F or a W depends on the communication with the instructor as to the student's individual situation.

The grade of Incomplete (I) is exceptional and given only to students whose completed coursework has been qualitatively satisfactory but who have been unable to complete all course requirements because of illness or other circumstances beyond their control. The grade of Incomplete may be considered only for students who have completed at least 85 percent of the total coursework requirements with a grade of C or better. The student must request an Incomplete before the end of the semester. The faculty member retains the right to make the final decision on granting a student's request for an Incomplete, even though the student may meet the eligibility requirements for this grade. If the request is approved, the faculty member will determine a deadline for which work must be completed, and the grade the student will receive if the work is not completed on time.

Class Policies

The following policies are specific to this course. Students are also responsible for the college policies included on the Student Regulations page of the Maricopa Community College District website.

General Conduct

- Students are expected to conduct themselves in a responsible, mature, and academically honest manner. Be honest in everything you do. Do not present someone else's work as your own.
- Any student caught cheating on an assignment/exam will receive a grade of zero for that
 assignment/exam and is subject to disciplinary action in accordance with SCC policies. This may include
 withdrawal from the class.

Attendance

- Because this is a hybrid course, "attendance" includes
 - In-person attendance at class meetings, and
 - Online attendance in MOER each week.
- You are expected to be on time and prepared for class. Being prepared means having the proper materials with you when you arrive in class (calculator, notes, paper, pencil) as well as all assignments completed. Otherwise, you will be marked absent.
- You are expected to be an active participant in group work and class discussions, and stay the full length of the class period. Otherwise, you will be marked absent.
- I will not spend class time going over material you have missed due to tardiness or absence.
- You are expected to spend time outside of class working on the online assignments. If a week goes by
 and you have not worked on the Online Homework assignment in MOER, this will count as one absence
 (unless all assignments for the week have been completed early).
- If you acquire more than two absences (in person or online), you may be withdrawn from the course.
- You are expected to complete all assignments prior to the date of any absence. No late work will be
 accepted if you are absent or late to class.

Expectations for Time Spent Outside of Class

This is a five credit-hour course that meets for 8 weeks. As such, you will need to dedicate significant time to this course. Based on the federal credit hour definition, students should plan to spend a minimum of 28 hours on course content weekly.

Class Drop

If you realize right away that this class is not for you, you will need to drop the class as soon as possible (within the first few days of class) in order to receive a full refund. Check the College Catalog for these important dates. You are responsible for dropping within the window to obtain a refund if you decide that is what you want to do.

Withdrawal Policies

Students can withdraw from this class at any time prior to the Final Exam. If you find that you need to withdraw from the course, please speak to me about it first. I may be able to recommend other options or discuss alternative courses of action concerning future classes.

This is not a self-paced class. You have assignments and due dates and must make regular and consistent progress on course work and assignments. Students that stop participating and fail to respond to instructor MOER communication will be withdrawn from the class.

Please note that I will not give you an F if you merely stop participating. If you meet or exceed the limits listed below, then you may be withdrawn from the class and not receive a letter grade (A–F).

- Students who do not create their MOER account AND complete all orientation assignments by 11:59PM on the class start date may be dropped from the class as a no-show. (This policy protects your refund for the course)
- Students who do not log in to MOER and make progress on the assignments for a 7-day period may be withdrawn from the class
- Students who acquire more than two absences (in person or online) may be withdrawn from the class.
- Students who miss more than two online tests may be withdrawn from the class.
- Students who miss an exam may be withdrawn from the class.
- Cheating on any assignment or exam may result in withdrawal from the course.
- Students who do not take the Final Exam may be withdrawn from the class. NOTE: **All** enrolled students who take the Final Exam will receive a letter grade (A, B, C, D, or F) for the class.

If circumstances are such that you cannot complete the semester, it is your responsibility to withdraw from the class. If you are withdrawn by your instructor for exceeding the allowable absences indicated above, the instructor is required by law to report when you last attended class.

Information contained in this syllabus is subject to change during the semester at the discretion of the instructor. Any changes will be posted on the MOER site, and an email will be sent out to all students through the email you use to set up your MOER account.

Students are responsible for the information contained in this syllabus. Students are responsible for college policies included in the College Catalog and the Student Handbook.

MAT220 Hybrid – Summer 2024 Schedule

- Lessons are due at the beginning of class on the day that unit will be covered.
- Unit Tests are due at 11:59PM (AZ time zone)
- Exam Reviews are due at the beginning of class on Exam days.
- Check MOER for the full calendar.

Monday Class	Tuesday	Wednesday Class	Thursday
June 3: Orientation	June 4	June 5: Unit 1	June 6: Unit 1 Test Due
June 10: Unit 2	June 11: Unit 2 Test Due	June 12: Unit 3	June 13: Unit 3 Test Due
June 17: Unit 4	June 18: Unit 4 Test Due	June 19: Unit 5	June 20: Unit 5 Test Due
June 24: Unit 6	June 25: Unit 6 Test Due	June 26: MIDTERM	
July 1: Unit 7	July 2: Unit 7 Test Due	July 3: Unit 8	(Friday July 5) Unit 8 Test Due
July 8: Unit 9	July 9: Unit 9 Test Due	July 10: Unit 10	July 11: Unit 10 Test Due
July 15: Unit 11	July 16: Unit 11 Test Due	July 17: FINAL EXAM	All online work closes at 5:00PM Thursday July 18

The instructor reserves the right to modify this schedule at any time. Any changes will be announced in class and posted in MOER. You are responsible for these changes whether or not you attend class on the day of an announcement.