

MAT 221 Calculus with Analytic Geometry I Syllabus Fall 2010

Chandler-Gilbert Community College

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Office Hours M-R 8:30 – 9:45 am

Sect. #35306 MW 1:00–2:40 pm Rm IRN 230

Sect. #35308 TR 1:00–2:40 pm Rm IRN 230

Sect. #35692 M-R 9:50–10:40 am Rm BRD 172

TEXT: *Calculus: Single and Multivariable*, by Hughes-Hallett, Gleason, McCallum, et al., John Wiley and Sons, 5th edition

e-book ISBN: 978-0-470-46158-7

Sect. #35306 MW

<http://edugen.wiley.com/edugen/class/cls188854/>

Sect. #35308 TR

<http://edugen.wiley.com/edugen/class/cls188855/>

Sect. #35692 M-R

<http://edugen.wiley.com/edugen/class/cls188858/>

Hardcover book ISBN: 978-0-470-08914-9

When purchasing your text be sure to get the access code for the online homework.

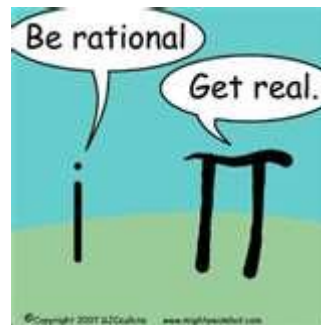
MATERIALS: Text, notebook, graph paper, and a graphing calculator (**TI-83 or TI-84**)

PROFESSIONAL CONDUCT IN A LEARNING ENVIRONMENT

- ✓ ATTEND EVERY CLASS
- ✓ Be prepared for class by doing the assignments and bringing the required materials
- ✓ Our focus supports success for all students and staff
- ✓ Listen respectfully
- ✓ Appreciate differences in each other
- ✓ Each member present is responsible for the energy level and tone of the class
- ✓ We start and end class on time (Be punctual and present for the entirety of the class)
- ✓ Commit to results, process, and relationships
- ✓ Appropriate and respectful use of electronic equipment
- ✓ We allow ourselves to engage and risk in ways that support personal growth
- ✓ Work *with* other students whenever possible. Do not let someone just copy down what you have worked hard to get! Help them understand instead.
- ✓ Keep a working portfolio that includes:
 - Handouts
 - Notes and examples
 - Homework and group work
 - Returned tests
- ✓ Read the textbook and study the examples that are provided
- ✓ Contact me if you have problems with the course as soon as the difficulty begins

CLASS SCHEDULE

A comprehensive calendar of topics and test dates will be given at the beginning of the semester. The dates are subject to change depending on the necessitated pace of the class. Additionally an assignment calendar will be distributed for each test unit.



COURSE DESCRIPTION

This course is the study of differential calculus including functions, limits, continuity, and average and instantaneous rates of change. A large emphasis will be on the use of current technology and mathematical modeling of real world setting emphasizing physical interpretations and problem solving through the use of derivatives.

Prerequisites: Grade of "C" or better in (MAT150 or MAT151 or MAT152 and MAT182) or MAT187 or equivalent or satisfactory score on district placement exam.

At the end of the semester, you should be able to:

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.

OUTSIDE PREPARATION

The Arizona Board of Regents has established as a general guideline that each course should require a student to spend a minimum of two hours in preparation outside the class for each hour spent in class. The time outside of class should be devoted to reading; taking chapter notes; computer work; preparation for group activities, tests, quizzes, etc.

ATTENDANCE

Regular attendance and classroom participation are needed for successful completion of this course. Any student who accumulates **three** unofficial absences may be dropped from the class. Use of a "W" or "Y" as a withdrawal grade will be at my discretion. Notify me in advance if you will not be able to attend class. **You are responsible for the material presented when you are not in class.** Contact classmates to ensure you are prepared for the next class. Contact me anytime you miss class via a phone call or email.

GRADING PROCEDURE

Description	Point Value
Homework units	20 points each
Participation	20 points
Projects/ in-class assignments	2-50 points each
Chapter Exams	100 points each
Final Exam	165 points

GRADING SCALE

A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	59% and below

HOMEWORK

The purpose for homework is to create a core of skills that will help you develop your understanding and application of calculus concepts. Mathematics at this level requires honest thoughtful effort to succeed. It is an ongoing process of trial and error, and then success. For this reason homework will be graded on effort. Homework will be done online through Wiley Plus. The access code is provided when you purchase your book. You will be responsible for coming to class with your homework prepared, ready to discuss. Homework will be due on test days and given a completion score from 0 (none completed) to 20 points (100% complete). A comprehensive listing of assignments will be given at the beginning of each test unit.

PARTICIPATION POINTS

Students will earn participation points based on attendance and classroom effort. To earn 20 points, always attend class, participate in activities, and never be late. Each absence results in losing 5 points and late arrivals deduct 2 points. The remaining points are earned by participating in class discussions and activities.

LATE WORK

Late work is not accepted. Work can be sent via email or fax to avoid being late. Be sure to notify me if you fax an assignment so I can watch for it.

MAKE UP EXAMS

Exams ***MUST*** be taken on the scheduled date unless ***prior*** arrangements have been made with the instructor and are offered for officially recognized absences only. Missed exams, due to an unofficial absence, can be made up until the day the test is returned to the class, usually the next class period. However, any exam taken after the exam date will be valued at 75% of the score received.

FINAL EXAM

The final exam is a required element of the course. It is a comprehensive common final taken by all CGCC students and is worth 20% of your grade, or 165 points.

GRAPHING CALCULATOR

A graphing calculator is a necessary and required tool for the course. The CGCC Mathematics Division has some TI-84 calculators for rent. Check online for the form and procedure. **You will need a calculator immediately.**



MATH COMPUTER LAB

If you need a computer to complete a ***math*** assignment, including homework, CHO109 is a dedicated Math Lab and is open Monday through Thursday from 2:00 pm – 4:00 pm. It will be staffed by a mathematics faculty member.

ONLINE TEACHER EVALUATIONS

Teacher evaluations will be done at www.cgc.maricopa.edu/eval during November. Please be honest. I appreciate feedback so I can improve.

STATEMENT REGARDING OUTCOMES AND ASSESSMENT

The faculty and programs at CGCC are dedicated to effective teaching and successful learning with emphasis in the following areas: communication, critical thinking, literacy, and personal development.

Periodically, students will participate in formal and informal assessment activities that will help faculty improve programs and teaching strategies. These activities are designed to facilitate student growth in whatever combination of the above outcomes applies to a course.

STATEMENT REGARDING STUDENTS WITH DISABILITIES

Students with disabilities are required to register for services in the Disability Resources and Services (DRS) office in the Student Center at the beginning of the semester. Do not wait to visit the DRS office if you want support with any CGCC classes. The DRS office will meet with you to determine accommodations based on appropriate documentation. Therefore, faculty members are not authorized to provide or approve any accommodations for students in this class without written instructions from the DRS office. This must be on file before any accommodation will be provided. You can contact the DRS office at (480) 857-5188.

INFORMATION ON LEARNING CENTER

The CGCC Learning Center's mission is to support students' academic learning by providing free tutoring and resources to reinforce and supplement classroom instruction and to assist CGCC students to achieve academic success. All Learning Center services are free to students currently enrolled at Chandler-Gilbert Community College. At the Pecos Campus, the Learning Center is located on the second floor of the Library, rooms LIB227, LIB228, and LIB229. At the Williams Campus, math and science tutoring takes place in EGEL101, and writing tutoring takes place in EGEL102. The Learning Center also provides instructional support resources in the form of videotapes, software, and print materials. For a schedule of tutoring hours, additional information, or assistance, students should contact the Learning Center at (480) 732-7231, or visit our website at <http://www.cgc.edu/lc>.

STATEMENT CONCERNING PLAGIARISM

Plagiarism is defined as presenting the work of another as one's own. More than four consecutive words from a source other than the writer constitute plagiarism when the source is not clearly identified in appropriate documentation format.

From the CGCC Student Handbook:

“Plagiarism includes, but is not limited to, the use of paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgement. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.”

ACTIVATE AND ACCESS YOUR MARICOPA STUDENT EMAIL

The Maricopa District provides every student with google-powered Maricopa Student Email upon enrollment. CGCC uses this official student email to send information concerning class enrollment, financial aid, tuition, and other important student information. Students *must activate* this email account in order to receive these messages. Activate your Maricopa Student Email now at maricopa.edu/google.

CGCC EMERGENCY ALERT

The CGCC Alert system utilizes text messaging and email to notify students of emergency situations on or around campus. Students should update their contact information in the Maricopa Online Student Center at my.maricopa.edu in order to receive a CGCC Alert notification in the event of an emergency.

STUDENT PAY2PRINT

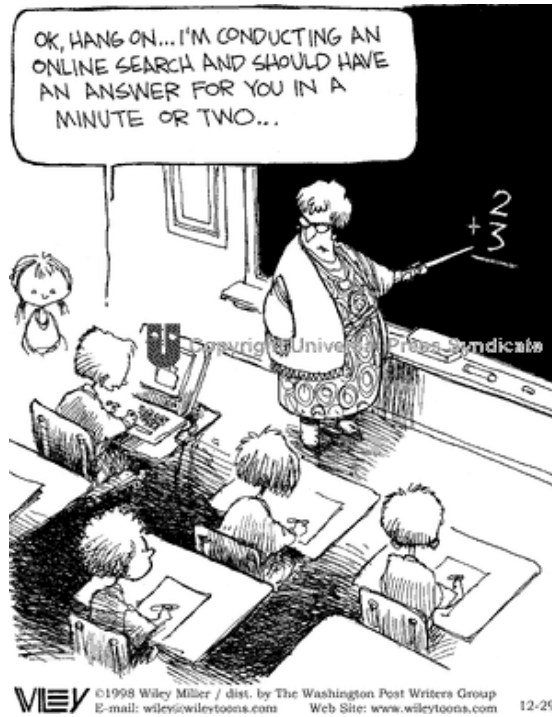
As of June 1, 2010, all CGCC students must pay for printing in the college computer labs and libraries. Registered students will receive their first 50 prints at no charge. Thereafter, black and white print costs will be 10 cents per print. Pre-paid printing accounts can be set up in the CGCC Cashier's Office. For more information, contact the CGCC Cashier's Office at (480) 732-7312.

WITHDRAWALS

A student who desires to withdraw from or drop this course must initiate the process with the proper forms from the CGCC Advisement Department. Any student who does not withdraw/drop the course through this process may be left on the roster and receive an “F” in the course at the conclusion of the semester.

Students are responsible for knowing and following all college policies as outlined in the CGCC catalog and student handbook.

Students will be notified by the instructor of any changes in course requirements or policies.



Student Information

Name _____

Do you work? _____ Hours worked each week _____

Place of Employment _____

Previous Math course _____ Grade _____

Questions/Concerns _____

Syllabus Receipt

I have received, read, understood (have sought clarification for those parts that were unclear to me), and intend to comply with all the requirements and procedures of this course.

Student Signature _____ Date _____