



CHIPOLA COLLEGE

COURSE SYLLABUS

Chipola's website: www.chipola.edu

COURSE TITLE:

Calculus and Analytic Geometry II

COURSE NUMBER:

MAC 2312

COURSE DESCRIPTION (with prerequisites):

This is a course which includes techniques of integration; applications of the integral; polar coordinates; sequences and series; Taylor series; conic sections; and vectors. Prerequisite: A "C" grade or higher in MAC 1311. A "C" grade or higher must be earned to advance to a higher level mathematics course or to satisfy part of the general education requirement in mathematics.

4 semester hours credit.

NAME(S) OF INSTRUCTORS:

Stan Young

EFFECTIVE ACADEMIC YEAR:

2022-2023

REQUIRED TEXTBOOKS AND INSTRUCTIONAL MATERIALS:

Calculus, 11th Edition, by Larson & Edwards, Brooks/Cole, Cengage Learning

REQUIRED: Enhanced WebAssign Printed Access Card for Calculus, Multi Term Courses ISBN: 9781337652650 **OR** Text + Enhanced WebAssign Homework and eBook LOE Printed Access Card for Multi Term Math and Science ISBN: 9781337604741

A TI-84 graphing calculator is required for this course.

GRADING POLICY:

The standing of a student in each course is expressed by one of the following letters and corresponding grading system:

A – 90 – 100

B – 80 – 89

C – 70 – 79

D – 60 – 69

F – 59 or less

The Chipola Catalog provides policies and procedures regarding the grading system. A student's Grade Point Average is derived from the grading system/quality point scale.

ATTENDANCE AND WITHDRAWAL POLICIES:

Chipola College expects regular attendance of all students and for all instructors to record attendance daily. Students who are absent from classes for any reason other than official college activities must satisfy the instructor concerned that the absence was due to illness or other clearly unavoidable reasons. Otherwise, the student may suffer grade loss at the discretion of the instructor. Chipola policy allows each instructor to specify in the Instructor First Day Handout whether or not an absence is excusable and what effect the absence or tardy may have on the grade.

A student is allowed to repeat a course a maximum of three (3) times. **On the third attempt a student (1) must bear the full cost of instruction (unless waived by Student Services), (2) cannot withdraw, and (3) must receive a grade.**

MAKE-UP POLICY:

Chipola allows each instructor to specify in the Instructor First Day Handout the makeup policy.

ACADEMIC HONOR CODE POLICY:

Students are expected to uphold the Academic Honor Code, which is based on the premise that each student has the responsibility to (1) uphold the highest standards of academic honesty in his/her own work; (2) refuse to tolerate academic dishonesty in the college community; and (3) foster a high sense of honor and social responsibility on the part of students. Further information regarding the Academic Honor Code may be found in the Chipola Catalog, Student Governance section.

STUDENTS WITH DISABILITIES POLICY:

Chipola College is committed to making all programs and facilities accessible to anyone with a disability. Chipola's goal is for students to obtain maximum benefit from their educational experience and to effectively transition into the college environment. Students with disabilities are requested to voluntarily contact the Office of Students with Disabilities to complete the intake process and determine their eligibility for reasonable accommodations.

NOTICE OF EQUAL ACCESS/EQUAL OPPORTUNITY AND NONDISCRIMINATION:

Chipola College does not discriminate against any persons, employees, students, applicants or others affiliated with the college in regards to race, color, religion, ethnicity, national origin, age, veteran's status, disability, gender, genetic information, marital status, pregnancy or any other protected class under applicable federal and state laws, in any college program, activity or employment.

Wendy Pippen, Associate Vice President of Human Resources, Equity Officer and Title IX Coordinator, 3094 Indian Circle, Marianna, FL 32446, Building A, Room 183C, 850-718-2269, pippenw@chipola.edu.

LIBRARY AND ON-LINE REFERENCE MATERIALS:

The library is a comprehensive learning resource center providing information in print, electronic, and multimedia format to support the educational objectives of the College. On-line catalogs, e-books, and electronic databases can be accessed through the Library Resources link within your course in Canvas or by using the *Search* icon on the

Chipola Library website at www.chipola.edu/library. If you have questions about database usage, consult the “How to Use the Chipola Databases” on the Library website or call the Library at 850/718-2274 during regular hours. Library hours are posted each semester at the building entrance and on the Library website. See your Instructor First Day Handout for individual instructor recommendations and resources.

TECHNOLOGY RESOURCES:

The college’s learning management system is **Canvas**. Classes become available on Canvas on the first day of the semester. It is the student’s responsibility to log onto the Canvas system the first day of class to establish the first day of attendance and to check announcements. All official class communication must be through Canvas. For further information, contact your instructor or the Director of Learning Resources. The Canvas support hotline is available online in live chat and on the phone, toll-free, at 855-308-2812 for any issues utilizing Canvas. The **Technology Center**, located in the library, is equipped with computer workstations. Lab hours are posted each semester at the building entrance and on the Library website.

FREE TUTORING RESOURCES:

The Academic Center for Excellence (ACE) Lab, located in Building L, offers free tutoring from 8 a.m. to 5 p.m. and is equipped with computer workstations. ACE Lab hours are posted each semester at the room entrance and on the website. Additionally, live online tutoring conferences and individual tutoring sessions are available for a variety of courses through ACE @ Home. For a conference schedule or to schedule an individual appointment, visit “ACE Tutoring” in the left navigation from any course in Canvas.

ELECTRONIC DEVICE USAGE STATEMENT:

Classrooms should be free of all unnecessary distractions from the task of learning. Therefore, as a general rule, students should silence and avoid use of all electronic devices (laptops, phones, tablets, etc.) not being used for coursework. Consult first-day handouts for any specific policies related to the use of electronic devices in the classroom, as they may vary depending upon the nature of the course or the guidelines of the instructor. Faculty reserve the right to regulate the use of electronic devices and their accessories in class.

DISCIPLINE SPECIFIC COMPETENCIES / LEARNING OUTCOMES:

Demonstrate Basic Mathematical Skills and Knowledge

- M-1 Apply arithmetic, algebraic, or geometric skills to solve mathematical problems.
- M-2 Represent basic mathematical information verbally, numerically, graphically, or symbolically.
- M-3 Solve mathematical problems using appropriate technology
- M-4 Interpret mathematical models such as formulas, graphs, tables and schematics.
- M-5 Use mathematical processes to solve contextual problems. |

Linking Course-level Student Learning Outcomes with Discipline-Specific Competencies, Assessment Methods, and Artifacts

COURSE-LEVEL STUDENT LEARNING OUTCOMES FOR MAC 2312	DISCIPLINE-SPECIFIC GENERAL EDUCATION COMPETENCIES	ASSESSMENT METHODS FOR COURSE LEVEL STUDENT LEARNING OUTCOMES (see Notes below)
<ul style="list-style-type: none"> Evaluate definite, indefinite, and improper integrals by using basic integration rules, integration by parts, trigonometric integrals, trigonometric substitution, partial fractions, and integration tables. Construct Maclaurin and Taylor polynomials and bound the error in using such a polynomial to approximate a function Test for convergence of an infinite series using the comparison, limit comparison, ratio, root, divergence, alternating series, and integral tests, and use the sequence of partial sums in determining convergence Construct a power series representation for a function, and evaluate where it converges. Identify conics by their equations and/or properties, use polar coordinates and polar graphs, and write parametric equations for plane curves Identify points in space, calculate the distance between points, find the equation, center, and radius of a sphere, and perform basic operations of vectors in the plane and in space. 	<p>M1, M2, M3, M4</p> <p>M1, M2, M3, M4</p> <p>M1, M2, M3, M4</p> <p>M1, M2, M3, M4</p> <p>M2, M3, M4</p> <p>M1, M2, M3, M4, M5</p>	<p>UT, CF, H, PS</p> <p>UT, CF, H, PS</p> <p>UT, CF, H, PS</p> <p>UT, CF, H, PS</p> <p>UT, CF, H, PS</p> <p>UT, CF, H, PS</p>

Notes: Assessment Codes

BO - Behavioral Observation	EX - Dept Exam	Port - Portfolio	SD - Skills Demonstration
Cap Proj - Capstone Course	Exp - Experiments	Prac - Practicum	SE - Natl or State Standardized
CF - Cumulative Final	F - Final Exam	Pre/ Post - Pre-/Post-Tests	Sk - Ck Skills Check-Off
Clin - Clinicals	H - Homework	Proj - Projects	SP - Skills Performance
CP - Case Plan	Intern - Internship	PS - Problem Solving	T - Tests
CS - Case Study	J - Jury	Q - Quizzes	UT - Unit Tests
DB - Discussion Board	JP - Judged Perf/Exh	R - Recital	W - Writing Assignments
DE - Documented Essays	Obs - Teacher Observ	RP - Research Papers	
E - Essays	OT - Objective Tests	RPT - Report/Presentation	

MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

Teacher Facilitated: The teacher will be leading class discussions on the material contained in the text during each class period.

Student-Centered: The students will be solving problems during each class period using their own graphing calculators. Students will complete a portion of their homework electronically using WebAssign.

Office Hours: The instructor will be available during office hours for individual assistance. The instructor's schedule can be found posted on their office door and/or via their individual web site.

ACE Tutors: Student tutors are available to provide individualized help. Hours can be found posted each semester on the lab door and/or via the web site |

ASSIGNMENT AND/OR COURSE OUTLINE

See your Instructor First Day Handout for individual instructor assignment schedule.