



CHIPOLA COLLEGE

COURSE SYLLABUS

Chipola's website: www.chipola.edu

COURSE TITLE:

General, Organic and Biochemistry
for Health and Related Science I

COURSE NUMBER:

CHM 1030

COURSE DESCRIPTION (with prerequisites):

This course consists of selected topics, specifically designed for a health-related major, with practical application of the chemical concepts of matter, atoms, measurement, bonding, reactions, pH, etc. The organic and biochemistry portion will introduce carbon chemistry and biomolecules and their roles and functions in living organisms. Three hours lecture per week. Prerequisite: Eligibility for MAC 1105. Three semester hours credit.

NAME(S) OF INSTRUCTORS:

Travis Bates, M.S.
Instructor
batest@chipola.edu
850-718-2263

EFFECTIVE ACADEMIC YEAR:

2023-2024

REQUIRED TEXTBOOKS AND INSTRUCTIONAL MATERIALS:

Online Educational Resource: "The Basics of General, Organic, and Biological Chemistry," published by Saylor Academy

(http://saylordotorg.github.io/text_the-basics-of-general-organic-and-biological-chemistry/)

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 Phippen, 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:

Area 2 - Natural Science: Explore the Nature of Science

The purpose of the study of the natural sciences component in the core curriculum is to enable the student to understand, construct, and evaluate relationships in the natural sciences, and to understand the bases for building and testing scientific theories.

NS-1 Recognize appropriate scientific terminology.

NS-2 Apply scientific principles or concepts.

NS-3 Solve real-world problems using scientific knowledge.

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

COURSE-LEVEL STUDENT LEARNING OUTCOMES FOR CHM1030	DISCIPLINE-SPECIFIC GENERAL EDUCATION COMPETENCIES	ASSESSMENT METHODS FOR COURSE LEVEL STUDENT LEARNING OUTCOMES (see Notes below)
<ul style="list-style-type: none"> • Make use of the language and terminology of chemistry 	NS-1	T, CF, H, Q
<ul style="list-style-type: none"> • Demonstrate a working knowledge of the fundamental concepts in chemistry 	NS-1, NS-2, NS-3	T, CF, H, Q
<ul style="list-style-type: none"> • Differentiate between competing theories that explain chemical concepts such as Arrhenius acids and Brønsted-Lowery acids. 	NS-2, NS-3	T, CF, H, Q
<ul style="list-style-type: none"> • Solve problems relating to chemical concepts 	NS-1, NS-2, NS-3	T, CF, H, Q
<ul style="list-style-type: none"> • Interpret data from chemical experiments graphically or numerically 	NS-1, NS-2, NS-3	T, CF, H, Q
<ul style="list-style-type: none"> • Identify how technology is used in chemical processes 	NS-1, NS-3	T, CF, H, Q

Notes: Assessment Codes

BO - Behavioral Observation
Cap Proj - Capstone Course
CF - Cumulative Final
Clin - Clinicals
CP - Case Plan
CS - Case Study
DB - Discussion Board
DE - Documented Essays
E - Essays

EX - Dept Exam
Exp - Experiments
F - Final Exam
H - Homework
Intern - Internship
J - Jury
JP - Judged Perf/Exh
Obs - Teacher Observ
OT - Objective Tests

Port - Portfolio
Prac - Practicum
Pre/ Post - Pre-/Post-Tests
Proj - Projects
PS - Problem Solving
Q - Quizzes
R - Recital
RP - Research Papers
RPT - Report/Presentation

SD - Skills Demonstration
SE - Natl or State Standardized
Sk - Ck Skills Check-Off
SP - Skills Performance
T - Tests
UT - Unit Tests
W - Writing Assignments

MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

Lecture/Teacher facilitated: The teacher will be leading class discussions on the material contained in the text during each class period using visual aids including PowerPoint presentations, which students have access to via Canvas.

Student-centered: The students will be responsible for solving homework problems, and forming group study sessions outside of class.

ACE Lab tutors: Student tutors are available in the lab 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

Throughout the semester, we will cover the following topics:

Introduction to Chemistry and the Scientific Method

Measurements and Calculations

Matter and Energy

Chemical Foundations: Elements, Atoms, Ions

Nuclear Chemistry

Ionic and Molecular Compounds

Chemical Quantities and Reactions

Gases

Solutions

Acids and Bases and Equilibrium

Introduction to Organic Chemistry

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