

CHIPOLA COLLEGE COURSE SYLLABUS

Chipola's website: www.chipola.edu

COURSE TITLE: COURSE NUMBER:

Introduction to Physical Science

PSC 1121

COURSE DESCRIPTION (with prerequisites):

A general education course involving an elementary study of the physical laws that govern the universe, and the characteristics of matter, including the changes it undergoes. Demonstrations and practical applications are emphasized. This course is not intended for science majors. Credit will not be granted to students who have previously received credit for CHM 1045 or above or any physics course. Prerequisite: Eligibility for MAC 1105. 3 semester hours credit

NAME(S) OF INSTRUCTORS:

Jeff Bodart, Ph.D. Professor bodartj@chipola.edu 850-718-2268

EFFECTIVE ACADEMIC YEAR:

2023-2024

REQUIRED TEXTBOOKS AND INSTRUCTIONAL MATERIALS:

Bill W. Tillery, *Physical Science*. 11th Edition, McGraw Hill Publishing.

ISBN: 9780077862626

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:

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 PSC1121	DISCIPLINE-SPECIFIC GENERAL EDUCATION COMPETENCIES	ASSESSMENT METHODS FOR COURSE LEVEL STUDENT LEARNING OUTCOMES (see Notes below)		
Predict the kinematical parameters that describe motion in one and two dimensions.	NS-1, NS-2, NS-3	OT, PS, UT H		
Examine changes in motion by using Newton's 2 nd law and momentum applications	NS-1, NS-2, NS-3	OT, PS, UT H		
Calculate mechanical work and exchanges in mechanical energy, and recall modern sources of energy used in society,.	NS-1, NS-2, NS-3	OT, PS, UT H		
Calculate electric forces, analyze resistive circuits, and review the creation of electrical power.	NS-1, NS-2, NS-3	OT, PS, UT H		
Identify the periodic properties of matter and structure of the elements in the periodic table using properties of the electron configuration to predict chemical bonding and formula names	NS-1, NS-2, NS-3	OT, PS, UT H		

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
CF - Cumulative Final	F - Final Exam	Pre/ Post - Pre-/Post-Tests	Standardized
Clin - Clinicals	H - Homework	Proj - Projects	Sk - Ck Skills Check-Off
CP - Case Plan	Intern - Internship	PS - Problem Solving	SP - Skills Performance
CS - Case Study	J - Jury	Q - Quizzes	T - Tests
DB - Discussion Board	JP - Judged Perf/Exh	R - Recital	UT - Unit Tests
DE - Documented Essays	Obs - Teacher Observ	RP - Research Papers	W - Writing Assignments
E - Essays	OT - Objective Tests	RPT - Report/Presentation	5 0

MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

Lecture is the primary method of instruction. Students are expected to be attentive and are encouraged to ask questions. Lecture will be primarily from the textbook and will be enhanced by overhead presentations, demonstrations, charts, models, and board illustrations. Students are responsible for any material contained within the assigned chapters of the textbook, as well as any material covered during lecture. Emphasis should be placed on the key terms, the review material at the end of each chapter and online material available on the Chipola website as a means of preparing for tests.

ASSIGNMENT AND/OR COURSE OUTLINE

Week	Lecture Topic	
1	Introduction	
	What is Science? Chapter 1	
2	Motion, Chapter 2 up to p. 39	
	Math Review, Appendix A Motion	
	Projectile Motion, Supplemental Lecture Info	
3	Motion, Chapter 2 (continued)	
	Exam I	
4	Motion, Chapter 2 from p. 39	
5	Motion, Chapter 2 from p. 39 (continued)	
	Momentum in Collisions, Supplemental Lecture Info	
6	Exam II	
	Energy, Chapter 3	
	Work and Energy Conservation, Supplemental Lecture Info	
7	Energy, Chapter 3 (continued)	
8	Exam III	
	Electricity, Chapter 6	
9	Electricity, Chapter 6 (continued)	
10	Circuits and Resistance, Supplemental Lecture Info Exam IV	
11	Atoms and Periodic Properties, Chapter 8	
12	Atoms and Periodic Properties, Chapter 8 (continued)	
13	Chemical Bonds, Chapter 9 (continued)	
14	Chemical Reactions, Chapter 10	
15	Chemical Reactions, Chapter 10 (continued)	
	Cumulative Final Exam	

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