



CHIPOLA COLLEGE

COURSE SYLLABUS

Chipola's website: www.chipola.edu

COURSE TITLE:

Ecology

COURSE NUMBER:

PCB 4043C/PCB4043L

COURSE DESCRIPTION (with prerequisites):

An introduction to living systems at the population and community/ecosystem levels. It includes energy flow and nutrient cycling in ecosystems; community organization, development and classification; population structure and dynamics. Labs may include field work, lab analysis and use of interactive software. This course addresses specific state-adopted standards, subject matter competencies and pedagogy pertinent to the discipline and required for teacher certification. Prerequisites: BSC 2011/2011L and CHM 1046/1046L. 4 semester hours credit

NAME(S) OF INSTRUCTORS:

TBA

EFFECTIVE ACADEMIC YEAR:

2015-2016

REQUIRED TEXTBOOKS AND INSTRUCTIONAL SUPPLIES:

Molles, Ecology: Concepts and Applications, 6th Edition, 2010 McGraw- Hill
ISBN#9780073532493

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. 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 affect 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. Chipola College's Honor Code 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.

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 by using the *LINCCWeb* 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 eLearning. The Canvas support hotline is available online in live chat and on the phone, toll-free, at 855-308-2812 for any issues in accessing or utilizing Canvas. The **Information 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, Chipola College has contracted **Smarthinking**, a Pearson Company, for online tutoring services, accessible especially from 5 p.m. to 8 a.m. and weekends. Smarthinking can be accessed through 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:

ED Outcome 1: Demonstrate understanding of instructional design and lesson planning by applying concepts for human development and learning theories.

ED Outcome 2: Demonstrate ability to maintain a student-centered learning environment that is safe, organized, equitable, flexible, inclusive, and collaborative.

ED Outcome 3: Demonstrate effective instructional delivery and facilitation by utilizing deep and comprehensive knowledge of exceptional student education.

ED Outcome 4: Demonstrate understanding of assessment by analyzing and applying data from multiple assessments to diagnose learning needs and inform instruction.

ED Outcome 5: Demonstrate continuous improvement by designing purposeful goals to strengthen instructional effectiveness and impact student learning.

ED Outcome 6: Demonstrate professional responsibility and ethical conduct and fulfill expected obligations to students, the public, and the education profession.

LINKING COURSE-LEVEL OUTCOMES WITH DISCIPLINE-SPECIFIC COMPETENCIES AND ASSESSMENT METHODS

Major learning outcomes	Florida Educator Accomplished Practices	Florida Competencies and Skills Biology 6-12	Content Standards
1. Describe the interactions among ecosystem components.	8, 11	1.1, 1.2, 1.4, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.18, 4.1, 4.2, 4.5, 4.12, 4.16, 5.2, 8.2, 8.4, 8.5, 8.7, 8.8, 9.1, 9.2, 9.3, 9.4	1.1, 1.2, 1.3, 1.4.1, 1.4.2, 1.4.4, 1.4.5, 1.4.6, 1.4.7, 1.4.8, 1.8, 1.8, 2.1, 2.2, 2.4.1, 2.4.2, 2.6.1, 2.6.2, 2.7.4, 3.3, 4.1, 4.2, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.8, 4.3.9, 5.1, 5.2, 5.3, 5.4, 5.5, 6.8, 6.12, 6.17.3, 7.12, 9.1, 9.2, 9.6, 9.8, 9.13, 9.14, 9.15, 9.16, 9.17, 9.18, 9.19, 9.2, 9.21, 9.22, 9.23, 10.1, 10.2, 10.3, 10.4, 10.5, 10.8, 10.9, 11.3
2. List and explain interactions within populations.	8, 11	1.11, 1.12, 1.14, 1.15, 1.18, 5.2, 8.5, 8.6, 8.7, 9.3	1.1, 1.2, 1.4.1, 1.4.3, 1.4.4, 1.4.5, 1.4.6, 1.6, 1.8, 2.2, 2.4.1, 4.1, 4.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7, 4.3.8, 4.3.9, 5.1, 5.2, 5.3, 5.4, 5.5, 6.1, 6.2, 6.4, 6.5, 6.17.1, 6.17.2, 6.17.3, 6.17.4, 6.18, 8.20, 8.21, 8.24, 8.25, 10.1, 10.3, 10.7, 12.2, 12.3
3. Show the importance of ecosystems to the human population.	8, 11	1.1, 1.2, 1.11, 1.12, 1.14, 1.15, 1.18, 3.2, 8.3, 8.9, 8.10, 8.11, 8.12, 9.3	1.1, 1.2, 1.4.2, 1.4.4, 1.4.5, 1.4.6, 1.4.7, 1.5, 1.6, 1.7, 1.8, 2.2, 2.4.2, 2.5, 2.6.1, 2.6.2, 3.4, 3.6, 3.7, 4.1, 4.2, 4.3.1, 4.3.2, 4.3.3, 4.3.4, 4.3.5, 4.3.6, 4.3.7, 4.3.8, 4.3.9, 4.4.1, 4.4.2, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 6.8, 6.17.2, 6.17.3, 9.1, 9.2, 9.13, 9.14, 9.15, 9.16, 9.17, 9.18, 9.19, 9.20, 9.21, 9.22, 9.23, 10.1, 10.2, 10.3, 10.5, 10.8, 10.9, 10.10, 11.3
4. Apply ecological principals to solving environmental problems.	8, 11	1.1, 1.2, 1.11, 1.12, 1.14, 1.18, 4.11, 4.16, 5.2, 8.1, 8.7, 8.13, 9.2, 9.4,	1.2, 1.4.5, 1.4.6, 1.4.8, 1.6, 1.8, 3.3, 4.1, 4.2, 4.3.1, 4.3.8, 4.3.9, 5.1, 5.2, 5.3, 5.4, 5.5, 6.6, 6.8, 6.9, 6.12, 6.17.3, 6.19, 6.20, 9.8, 9.15, 9.20, 9.22, 9.23, 10.1, 10.4, 10.5, 10.8, 10.9, 11.3

MEANS OF ACCOMPLISHING STUDENT LEARNING OUTCOMES:

The primary method of instruction in the classroom is the lecture based on the textbook, supplemented by other text books, reference books, and instructor's experience.

The student will be involved in oral communication through responses to questions. Discussions are encouraged and they may arise by a question to the class or by questions from students.

The instruction is further supplemented with board illustrations, charts, slides, filmstrips, films, computer software, and demonstrations.

ASSIGNMENT AND/OR COURSE OUTLINE

Four (4) Unit Tests will be given during the semester covering selected material in 16 chapters. Each Test will have 40-50 multiple-choice, matching or fill-in-the-blank questions and will typically include additional essay items. Each Unit Test is worth 75 points. Each student will be take 5 quizzes on assigned reading materials from the text or other assigned reading. Each quiz will be worth 10 points. The laboratory portion of the class will include a two (2) Research Activities created and implemented by the students. The research Activities are worth 75 points each. Each student will have an opportunity to earn 500 points during the semester.

Unit 1 – Chapters 1, 2, 3, 4, & 6 Introduction to Ecology, Evolution, Population Ecology and Water Relations

Unit 2 – Chapters 8, 10 & 11 Social Interactions, Population Dynamics and Population Growth

Unit 3 – Chapters 12, 13, 14 & 15 Interactions: Competition, Exploitation & Mutualism

Unit 4 – Chapters 17, 18, 19 & 23 Communities, Energy & Nutrient Cycling & Global Ecology

Quizzes 1-5 TBA

Research Activities TBA

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