**BIO 206 Internet- Ecology**

**Science Department**

**Semester: Summer 2014**

**Catalog Course Description:** This ecology laboratory experience consists of discussions, demonstrations, experiments, films, and field trips pertaining to the relationships of man to the biosphere, human ecology resource use and environmental impact.

**Prerequisite(s):**RDG 100 or ESL 100 (Corequisite: BIO 205)

**Credit Hours:                           1**

**Departmental Website:**           <http://www.midlandstech.edu/science>

**Instructor:**                              David T. Corey

**Office:**                                     LET 412C

**Telephone:**                              803-738-7714

**Departmental Assistant:         Pam McPherson** (mcphersonp@midlandstech.edu)

**Department Chair:                   Dr. Geralyne Lopez-de-Victoria** (lopezg@midlandstech.edu)

**FAX:**                                         790-7530

**email:**               coreyd@midlandstech.edu

**Campus Mailbox:**                      LET 421

**Class Schedule:**                        Internet

**Office Hours:**                            Posted within course

**Textbook(s):** Visualizing Environmental Science, Berg et al, 3rd

                                                 edition or most recent edition in the Bookstore.

**Additional Textbooks/Readings:** Optional Material: Lecture notes or other material designated by instructor other than required texts listed on this course syllabus are considered optional.

**General Education Core Competency Statement:**  This course is designed to meet the college's general education core competency for Scientific Reasoning.

**Course Objectives:** The purpose of this course is to enable the student to obtain an understanding of the relationships of man with other organisms and with the environment.

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**Course Outcomes and Competencies:**

**Intended Course Outcome:**  Students in Biology 206 will understand and be able to use scientific reasoning and principles through the study of relationships of man with other organisms and the environment.

**Course Competency (Performance Measure):**  Students in Biology 206 will demonstrate a proficiency and understanding of the basic principles of environmental science by completing the objectives for Biology 206.

Competency 1: The student will understand the first principle of sustainability which states “For sustainability, ecosystems use sunlight as their energy source.” Students will be able to contrast human energy use to that of natural ecosystems.

Competency 2: The student will understand the second principle of sustainability which states “For sustainability, ecosystems dispose of wastes and replenish nutrients by recycling all elements.” Students will compare how humans process elements versus natural ecosystems.

Competency 3: The student will understand the third principle of sustainability which states “For sustainability, the size of consumer populations is maintained such that overgrazing and other forms of overuse do not occur.” Students will have a basic understanding of the mechanisms that keep natural populations stable and in equilibrium.

Competency 4: The student will understand the fourth principle of sustainability which states “Ecosystems show resilience when subject to disturbance.” Students will be able to identify the factors that maintain ecosystem balance.

Competency 5: The student will understand the fifth principle of sustainability which states “Ecosystems depend on biodiversity.” Students will be able to describe the intrinsic and instrumental values that species and biodiversity offer.

**Course Learning Objectives:**

The purpose of this course is to enable the student to obtain an understanding of the relationships of man with other organisms and with the environment. Specific objectives include:

1. The student will be able to identify the basic components of ecosystems and

 understand how they interact.

1. The student will be able to identify the advantages and disadvantages of both

 renewable and Nonrenewable energy sources.

1. The student will have an appreciation for the wealth of natural resources and history in South Carolina.

4. The student will be able to explain how natural ecosystems recycle water, nutrients

 and elements.

                5. The student will be able list the advantages of recycling.

                6. The student will be able to trace the general history of human population growth.

                7. The student will be able to list the ways the human lifestyle degrades the

 environment.

                8. The student will be able to list the factors that contribute to global warming as well

 as the potential consequences.

                9. The students will be able to distinguish between threatened and endangered species.

                10. The student will understand the causes of species loss.

**Measurement Instrument:**  Students in Biology 206 will successfully complete the course objectives by achieving a final grade of 70% based on laboratory exams.

**Course Attendance:** Students will be allowed to miss twice the number of times a lecture or laboratory section meets

If the laboratory meets once a week, 2 absences are allowed.

If the student misses more than 10 minutes of class by either arriving late or leaving early, then the student will be counted as absent, missing fewer than 10 minutes is a tardy.  Three tardies count as one absence.

Students adding courses after classes begin are responsible for work covered from the first day of class.  All classes missed count as absences.

Please note the following: You are responsible for all material and announcements presented, whether you are present or absent.

**Withdrawal:** Students may withdraw from a course anytime before the last week of classes (see the current semester college calendar, available on the MTC web site, for official dates).  Students who wish to withdraw from a course must submit a withdrawal form to records.  The date of withdrawal may affect a number of things, including financial aid/ tuition reimbursement, tuition refunds, and course grades.  The effective date of withdrawal depends upon the date the withdrawal form is submitted to records.  It is the student's responsibility to be aware of relevant dates, to make an informed decision, and if necessary, to submit withdrawal forms in a timely fashion.

        For questions regarding the effect of withdrawal on financial aid or tuition reimbursement students should contact Student Financial Services.  Deadlines for tuition refunds may be found on the current semester college calendar, available on the MTC web site, or by calling the cashier's office.

        Students who withdraw before midterm will receive a grade of W.  Students who withdraw after midterm and have an overall class average of 60% or greater will receive a grade of W.  Students who withdraw after midterm and have an overall class average below 60% will receive a grade of WF, which is calculated as an F.

      Grades of W or WF are also assigned when a student exceeds the maximum number of absences allowed in a course.  These grades are entered on the final grade roster along with the last date of attendance (LDA).  Students should understand that the LDA does not constitute an effective date of withdrawal and should not consider a decision to stop attending class to be equivalent to withdrawal.

**Course Grading Scale:** The final grade for this course will be determined as follows:

A (90-100)          B (80-89)                 C (70-79)            D (60-69)                    F (<60)

A grade of zero will be recorded for any announced exam (or assignment), which is missed. Instructor will indicate whether one lecture exam can be made up or whether the cumulative final exam will count twice in place of the missed exam.

The final grade will be calculated as follows:

Weekly quizzes @ 25 pt each\*\*                 200 pts

Weekly discussion questions 3 pt each\*\*    36 pts

Midterm Exam                                          100 pts

Final Exam                                               120 pts

Written Paper                                           100 pts

Total                                                        556\*\* pts

\* Some additional assignments may be added during the course.

\*\*Exact number of points may vary from semester to semester.

Quizzes are given on a computer from anywhere you have access to the course. Quizzes will only be given on Mondays from noon to midnight (11:59). You will have 30 minutes to complete the quiz, save your answers and submit the quiz. There will be a Midterm Lab Exam and a Final Lab Exam. These will only be available in the Beltline Testing Center the week they are scheduled from Thursday through Saturday. The exact time the exams can be taken on tose days are based on the Testing Centers hours and policies. You will have 60 minutes to complete, save your answers and submit the quiz. There will be no make-ups for any reasons or extension of time on quizzes or exams. It is also strongly recommended that you use a computer with battery-backup to take the quizzes since there will be no make ups or extension of time for any reason.

**You are expected NOT to use notes or books of any kind when taking the quizzes . You are expected to be on your personal honor behavior. If it becomes apparent that students are using notes or books on the quizzes it might become necessary to reduce the time limit for the quizzes or require that they be taken in the Beltline Testing Center.**

**Assignments and Class Participation**

Students must log into the course a minimum of 3 to 4 times a week and spend a minimum of 5 to 10 hours or more on-line or visiting area establishments per week but this will vary depending on the students’ ability to grasp the material.  Each week assignments will be posted in each Lab. Students will have until 11:59 pm the following Monday to post replies.  No late replies (After 11:59 pm Monday) will be accepted.

Weekly Lab assignments are posted in the individual Labs on the Course Content Page. New labs will not open until the previous lab availability period has ended.

**Last Date of Attendance (LDA) and Attendance**

If for any reason you drop the course, your assignment post dates and exam dates will be used to determine your LDA.

Assignments are not optional, they must be completed.  Failure to complete any 3 or more assignments (and or exams) will result in you being dropped from the course.  Logging into the course is not sufficient to maintain attendance in this course.  You must be active on a weekly bases by completing assignments/exams.

**PLEASE NOTE:** Should change become necessary, the instructor reserves the right to adjust the requirements, pace, or scheduling of this course.  Any change will be announced in class before it becomes effective.

The Science Department Chair, Coordinators, and faculty are here to help you.  If you are having any problems in your classes, please contact the person who can help you.  If we don't know you are having problems, we can't help you.  Gerry Lopez is Department Chair and can be reached at 822-3548; Greg Mancini is Beltline Science Coordinator and can be reached at 738-7660**.** Contact Pam McPherson at 822-3548 for general information.

**Course Field Trips:** There will be multiple field trips throughout the semester.

**LABORATORY POLICIES AND SAFETY PRECAUTIONS**

The laboratory experience is designed to supplement and complement material covered in lecture, and is an integral part of the course.  Material may be presented in greater detail in lab than in lecture.  The laboratory experience may include dissections, films, demonstrations, experiments, workbook exercises, research and writing assignments, and field trips.  The day, time, and location of approved field trips will be held during regularly scheduled lab times.  Students will provide their own transportation.  The laboratory instructors will give a sufficient amount of information and guidance to allow students to complete each lab, but success in lab primarily involves the individual effort of each student.  To maximize learning and to minimize the risk ofaccidents or injury, the following policies and rules will be observed in science labs:

1. Laboratory exercises must be completed during the assigned lab period unless

otherwise designated by your instructor.

2.             Students should read laboratory exercises before coming to class.

3.             Do not disturb any equipment or demonstrations that have been set up, until your

 instructor has told you how to proceed with the assignment.

1. Apply yourself in lab. The exercises are designed to reinforce and expand upon

 material presented in the lecture.

5.             Follow directions carefully.

6.             Do not hesitate to ask your lab instructor for clarification of any instructions you do

 not understand.  However, do not expect your lab instructor to simply give you

 answers to information you should be obtaining through the completion of the various

 lab exercises.

7.             Bring all necessary materials to class, including your text.

8.             Do not bring any food or drinks 7.into any science lab.

9.             Know where the eyewash station and shower are located in each lab. Report injuries

 immediately to your lab instructor.

10.          Lab coats and protective eyewear are required in certain labs including microbiology

 and chemistry.

11.          At the end of each lab, leave your work space in good order by discarding waste

 materials, cleaning and disinfecting your lab table, returning all materials used to their

 proper place, and sliding your chair back under the table.

12.          No visitors are allowed in lab or lecture.

**Tentative Lab Schedule: The following lab schedule is for Fall/Spring. Summer scheduled will be altered due to only having 10 weeks.**

**Lab   Topic**

**1        Introduction**

**2        Supermarket Ecology**

**3        State Museum**

**4        Water and Water Pollution**

**5        Wild species and Biodiversity, Video's**

**6        Congaree Swamp National Monument**

**7        Midterm Lab Exam**

**8        Energy**

**9        Ecosystem Sustainability**

**10      Recycling**

**11      Composting, Sandhill Research Station**

**12      Riverbanks Zoo**

**13      Final Lab Exam**

 **College Policies**

**Students are expected to read the student handbook and abide by its policies. Copies of the handbook may be obtained at various locations on campus and is located on the web:** [**http://www.midlandstech.edu/planner/**](http://www.midlandstech.edu/planner/)

**Academic Dishonesty**: The Student Code addresses what constitutes academic dishonesty. All forms of dishonesty including, but not limited to, cheating on tests, plagiarism, collusion and falsification, will call for discipline.

**CHEATING ON TESTS** includes:

* § Copying from another student's paper.
* § Using materials during a test not authorized by the person giving the test.
* § Collaborating with any other person during a test without permission.
* § Knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or part the contents of any un- administered test.
* § Bribing any other person to obtain information about tests.
* § Substituting for another student, or permitting another student to substitute for oneself.

**PLAGIARISM** is the appropriation of any other person's work and unacknowledged incorporation of that work in one's own work offered for credit.

**Campus Emergency Protocol:** Students and employees are asked to report safety concerns or suspicious activities to Campus Security at 7199 (on campus) or 738-7199 (cell phone or off campus). In the event of an emergency, employees and/or students should immediately call Campus Security or local 911.  If an emergency occurs, the college will use a variety of methods to communicate additional information and instructions including the MTC Information Centers, campus loud speakers, MTC Alerts! (<http://www.midlandstech.edu/Phone_Alert.htm>), voice mail, email, college Intranet, and the MTC website homepage.

**Inclement Weather Policy:** In the event weather conditions or other emergencies cause the closing or a delayed start of Midlands Technical College, announcements will be made over local radio and TV stations, on the MTC Web site, and on the college's information line (803-738-8234).  Notices will be sent to students via Campus Cruiser Mail when applicable.  Separate announcements may be made for day and evening classes as weather conditions change during the day.

If the college closing or reopening means that there is at least 30 minutes of a class remaining, plan to attend that class. For example, if the college opens at 10:00 a.m. in TTH, classes that normally meet at 8:00 a.m. will not meet, but classes beginning at 9:30 a.m. will meet. If the college closes at 8:00 p.m., 6:00 p.m. classes will meet for their regular time, but 7:35 p.m. classes will not meet since there are fewer than 30 minutes remaining in class.

**Student E-Mail Account**s: All MTC students are assigned a college e-mail account upon admission to the college.  This account is called "Campus Cruiser Mail."  Campus Cruiser Mail is the primary mode by which the college communicates with students.  Students are responsible for checking their college e-mail on a regular basis for important information and announcements about registration, financial aid, cancelled classes, emergency announcements and other notices.  Students can use their college e-mail accounts to communicate with faculty, staff, fellow students, and others, in support of their educational pursuits.  In addition to e-mail, students will also have access to maintaining personal calendars and "tasks lists" through their Campus Cruiser e-mail account.

**Student Evaluation of Instruction:** Students have the opportunity to evaluate this course. The confidential evaluation process is conducted through MTC Online using the individual student's username and password. Announcements will be made during the term concerning how and when to complete the online evaluation. Students are encouraged to participate in this process.

**Students Requiring Special Accommodations**: If special accommodations are needed for a student with a disability, the student should go to Counseling Services on Beltline or Airport Campus for assistance. Documentation regarding a specific disability is required in order for special arrangements to be made. Confidentiality of information received will be maintained.

**SCIENCE DEPARTMENT CODE OF CONDUCT**

Student rights and responsibilities are outlined in the Student Handbook. We are extremely proud of the quality of students in the Science Department; however, there have been occasions where disciplinary action is necessary to prevent disruptive and dishonest behavior.  The following items are specific violations and consequences supported by the Science Department.  Your instructor will circulate a form for your signature stating that you understand the Science Department Course Syllabus, which includes this document.

1. Any student who exhibits behavior that is disruptive to the learning process such as talking, discourtesy to faculty or fellow students to include obscene language or gestures, or uncooperative actions will be asked to leave the classroom.  The student will be counted absent for this class.  Depending upon the nature of the offense or if it occurs during an exam the instructor may require that the student see the Science Coordinator, Chair of the Science Department, or the Director of Campus Life before returning to class.  Campus Security will be called for any threatening or violent behavior.

2. Beepers, cell phones, personal stereos, and similar devices are not permitted in class. Permission must be obtained from the Science Coordinator or Instructor for students who are emergency personnel or where there are extenuating circumstances.  Campus Security can locate a student and will interrupt a class if there is a situation that needs immediate attention

3. Any student proven to have engaged in academic dishonesty will be given a grade of zero on the exam or assignment. This includes, but is not limited to, giving or receiving information during an exam, use of unauthorized materials during an exam or assignment, plagiarism, or changing answers after a grade has been assigned.  An instructor must have reasonable proof that dishonesty has occurred.  Until an incident is verified, the student will be assigned a grade of "I" for the work.  Witnesses of cheating should report this immediately to the instructor.  The grade will be discussed confidentially with the student.  If the student denies that academic dishonesty occurred, the Chair of the Science Department or Science Coordinator will meet with the instructor and student. The instructor will be supported if departmental guidelines for handling cheating incidences were followed.  However, the student is referred to the Student Handbook for the policy on filing a grievance.  In any incident involving academic dishonesty, a report will be filed with the Director of Campus Life.

4. Students with complaints about instructors should follow the appropriate chain of command as outlined in the "Science Department Conflict Resolution" form. A form can be obtained from the Science Department. Signatures must be obtained at each level before the complaint will be validated. There may be some circumstances where the first contact is with the Science Coordinator who will discuss the problem with the instructor. All efforts possible will be made to resolve conflicts internally. However students should remember that matters can also be handled through the Academic Appeal/Grievance process detailed in the Student Handbook.