The mission of Motlow State Community College is to enrich and empower its students and the community it serves.

Biology 1330 / Environmental Science

Semester/Year of Course
Section # and Class Meeting Times

Instructor Information:
Name, Rank, and Title
Office Location
Office Hours
Academic Advising Hours (2 per week for full-time faculty)
Office Phone Number and Email Address

Credit Hours: 4

Prerequisites: Exemption from or completion of ENGL 0810, READ 0810, MATH 0810.

Catalog Description: The course introduces students to the current principles and techniques of environmental science. Topics include ecology, energy resource management, pollution and sustainability. Local field trips and laboratory exercises will be a major portion of this course.

Required Texts:

ISBN # 13: 978-1-4292-4029-1


Lab Requirements:

Group for Whom the Class is Intended:
This course is intended for students pursuing the following degrees and programs of study: BIOL 1330 is appropriate as a Natural Science option for general education curriculum core requirements for the following emphases under the university parallel major: Accounting, Art, Business Administration, Business Education, Communications, Computer Science, Early Childhood Education, Economics, Elementary Education, English, History, Industrial Management, Math, Political Science, Psychology, Secondary Education, Social Science, Social Work, Sociology and Undeclared.

Program Learning Outcomes:
After completing the requirements of the Biol 1330 Program, students will be able to:
1. Have an understanding of the causes, effects, and solutions of current environmental problems.
2. Have an understanding of ecosystems, energy sources, land use, geochemical cycles, population dynamics, and chemical and biological wastes. Laboratory/field trips provide hands-on experience in identification of biotic and abiotic factors affecting environmental quality. The course includes Professor led lectures and labs/field trips and guest speakers from Local, State, and Federal environmental agencies.

**Student Learning Outcomes:**

By the end of the course:

1. The student should be knowledgeable of the overview of environmental science and environmental systems.

2. The student should understand the interactions between the living and non-living world.

3. The student should have knowledge of evolution and biodiversity.

4. The student should be knowledgeable of population and community ecology.

5. The student should be knowledgeable of water resource issues: supply, distribution, use, and pollution.

6. The student should have knowledge of nonrenewable resources and renewable resources.

7. The student should have knowledge of pollution and its effects on the environment.

8. The student should be knowledgeable of conservation.

9. The student should be knowledgeable of climate change.

10. The student should understand sustainability.

**Student Objectives:**

Throughout the course, students will have the opportunity . . .

1. To attend all lectures and to attend and participate in all labs
2. To spend time outside class in the lab for independent study
3. To diligently study both text and notes
4. To seek outside help from the instructor as needed
5. To demonstrate knowledge of the Environmental Science to be assessed by the following lecture exams, quizzes, field reports, and topic presentation.

**Attendance Policy:** Roll will be called at the beginning of each class. If you are tardy for a class it is your responsibility to notify the professor in-writing, otherwise you will be marked absent. If you are tardy three (3) times it will count as an absence. Three absences will result in the deduction of a point from your final average and an additional point for each absence after.
General Classroom Policies:
1. Courtesy to one another is expected at all times. Disruptive behavior is not permitted. I reserve the right to ask a student to leave the classroom without notice.
2. Be on time, as lecture and lab begin on time.
3. Cell phones are to be turned off prior to entering classroom.
4. Prepared notes will not be provided to students. If you miss a day of class, please get a copy of the notes from a fellow student.
5. The text will be our definitive source on names, spelling, and terminology regardless of any other resources you may buy or that may be provided to you.
6. Exams will be corrected and returned to you within one week after the exam. I will NOT grade exams the same day, or in the presence of students. Do not call or come to my office for grades prior to the next regular class session after an exam.

Major Assignments and Method for Calculating the Final Grade:
- Four Lecture exams 400 pts
- Student-led Presentation (100) and Overall Participation (50) 150 pts
- Five (tentative – weather and logistics dependent) Field Trip Reports ~50 pts
- Total possible points ~600 pts

1. Lecture exams to include multiple-choice from the text book, field trips, and short answer/essay questions from class readings.
2. Student lead presentation to be selected from list below provided by the professor.

Grading Policies:
Grading Scale:
- A = 90 - 100%
- B = 80 - 89%
- C = 70 - 79%
- D = 60 - 69%
- F = 0 - 59%

1. YOU MAY MAKE UP ONLY ONE LECTURE EXAM. You must notify me on the day of the exam (i.e., 11:59 pm) in writing (i.e., email). You have one week to makeup the exam. Makeup exams will be Essay Format. Any student missing a second or third exam will receive a zero for those exams. There will not be a make-up offered for the final exam.
2. Cheating or the appearance of cheating will not be tolerated. I reserve the right to terminate your test and assign you a zero for that exam or assign an “F” in the course if I feel you have been cheating. You may, of course, appeal my decision to Student Affairs if you feel I have been mistaken or unjust.
3. Grades will not be given via telephone or e-mail. Grades will be posted on D2L.

Course Policies:
Academic Misconduct Policy:
Plagiarism, cheating, and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly, through participation or assistance, are immediately responsible to the instructor of the class. Based on their professional judgment, instructors have the authority to impose the following academic sanctions: (a) require the student to repeat the assignment for full or partial credit; (b)
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assign a zero, an F, or any other grade appropriate for the assignment or examination; (c) assign an F for the course. In addition, disciplinary sanctions may be imposed through the regular institutional procedures. For more information, see MSCC Policy 3:02:00:03.

**Classroom Misconduct Policy:**
The instructor has the primary responsibility for maintenance of academic integrity and controlling classroom behavior, and can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or conduct that violates the general rules and regulations of the institution for each class session during which the conduct occurs. Extended or permanent exclusion from the classroom, beyond the session in which the conduct occurred, or further disciplinary action can be effected only through appropriate procedures of the institution.

Disruptive behavior in the classroom may be defined as, but not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), text messaging, and the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, lap-top computers, games, etc.). For more information, see MSCC Policy 3:02:00:03.

**Class Cancelation Policy:**
If class is cancelled for any reason, you will be notified via our MSCC email or D2L page and will be told there how to prepare for the next class period. For these reasons, students are advised to take advantage of the Motlow Alert system in order to receive text messages when class is canceled. For more information, see the MSCC Home Page.

**Emergency Procedures Policy:**
In case of a medical emergency we will immediately dial 9-911 and report the nature of the medical emergency to emergency response personnel. We will try to stay with the person(s) in need and maintain a calm atmosphere. We will talk to the person as much as possible until response personnel arrive on campus, and we will have someone go outside to meet emergency personnel and direct them to the appropriate location. In the event of an emergency (drill or actual), a signal will be sent. Based on that signal, students will follow the procedures below for that specific type of emergency:

- **Loud warbling sound throughout Building (FIRE):** Collect purses and coats and proceed immediately out of your room and exit through the closest emergency exit. Proceed to the Designated Assembly Area closing windows and doors as you exit. Remain there until the "All Clear" Signal is given by an Emergency Management Team member. (Instructors- Provide your Designated Assembly Area, and its location to students)

- **Tornado Siren (SEVERE WEATHER):**
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Proceed to the closest designated severe weather shelter on the 1st floor and proceed all the way into the shelter. Crouch down on the floor with your head between your knees facing away from the outside walls. Remain there until the "All Clear" Signal is given. (Instructors- Provide the recommended room number or hallway location to students)

Air Horn (1 Long Blast) and Face to Face All Clear (INTRUDER/HOSTAGE): Ensure door is closed, locked and lights turned off. If your door will not lock, move some tables and chairs in front of the door quickly. Move immediately to the rear of the room away from the door and sit on the floor- out of sight if possible. Remain calm and quiet and do not respond to any inquiries at the door unless you have been given the "All Clear" and a member of law enforcement or your campus Emergency Management Team member makes face-to-face contact at your door.

Classroom Locked-door Policy:
In order to adhere to MSCC Emergency Preparedness Policy and to facilitate effective classroom management, the classroom door will remain closed and locked for the duration of the class period.

Miscellaneous:
Tobacco products are not permitted during lecture or lab times, tape recording of lectures or labs is not permitted, cell phones are not to be used during lecture or lab time except for photography and scheduling purposes.

Educational Technology:
Accessing Campus Computers or the MSCC Library from off Campus:
Your Username format is your First Initial, Last Name and Month and Day Birthday in the Format of MMDD. Example: Marcia Smith born on April 11, 1992 - Username: msmith0411. Your Pin will be the numeric pin you created when you initially applied to Motlow College.

Using D2L:
For help with D2L including how to submit materials to a Dropbox, see this page:
http://www.mscc.edu/techtube.aspx

Technical Support/Assistance:
Students having problems logging into a course, timing out of a course, using course web site tools, or any other technical problems, should contact the MSCC Technology Help Desk at 931-393-1510 or toll free 1-800-654-4877, Ext. #1510 (or d2lhelp@mscc.edu)

Disability Services/Accommodations:
Motlow College is committed to meeting the needs of qualified students with disabilities by providing equal access to educational opportunities, programs, and activities in the most integrated setting appropriate. This commitment is consistent with the College's obligations under Section 504 of the Rehabilitation Act of 1973 and the American with
Disabilities Act of 1990 (ADA). Together, these laws prohibit discrimination against qualified persons with disabilities. To this end, the Director of Disability Services for Motlow College coordinates services and serves as an advocate and liaison for students with disabilities attending Motlow College. Contact the Director of Disability Services here: http://www.mscc.edu/disability/index.aspx.

Students with disabilities who would need assistance in an emergency evacuation should self-disclose that need to the instructor no later than the second day of class or second group meeting.

**Confidentiality of Student Records:**
The education records of current and former students at Motlow State Community College are maintained as confidential records pursuant to The Family Educational Rights and Privacy Act (FERPA) of 1974 as amended. For further information, see MSCC Policy No. 3:02:03:00.

**Student Success:**

**Tutoring:**
MSCC Instructors can guide students to specific resources regarding Tutoring in their discipline. In particular, students may find help with Math and Essay Writing via each campus’ Learning Support labs. Students should contact the labs on their campus to schedule appointments for help. For additional help, see the Student Success page: http://www.mscc.edu/student_success/index.aspx

**Academic Advisement:**
MSCC Instructors can guide students to specific resources regarding Advisement. For additional help, see the Academic Advisement page: http://www.mscc.edu/advisement/index.aspx
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### Tentative Class (Lec/Lab) Schedule:

#### Suggested Instructional Schedule Lecture:

<table>
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<th>Student Learning Outcomes</th>
<th>Content to be Covered</th>
<th>Student Assignments/supplementary material</th>
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</thead>
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<td>1,2</td>
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<td>Read Chapters 1 and 2</td>
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<tr>
<td>2</td>
<td>1,2</td>
<td>Chapters 2,3; Quiz 1; Lab Report 1</td>
<td>Read Chapters 2 and 3</td>
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<tr>
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<td>1,2</td>
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<td>4</td>
<td>3 - 5</td>
<td>Chapters 5, 6</td>
<td>Read Chapters 5 and 6</td>
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<tr>
<td>5</td>
<td>3 - 5</td>
<td>Chapters 7, 9; Quiz 2</td>
<td>Read Chapter 7 and 9</td>
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<td>6</td>
<td>3 - 5</td>
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<td>Read Chapter 10</td>
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<tr>
<td>7</td>
<td>6, 7</td>
<td>Chapters 12, 13</td>
<td>Read Chapter 12 and 13</td>
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<td>6, 7</td>
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<td>8 - 10</td>
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<td>8 - 10</td>
<td>Chapter 19, Quiz 4</td>
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<td>13</td>
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<td>Lab Report 5</td>
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<td>14</td>
<td>1 - 10</td>
<td>Lab Project</td>
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<td>15</td>
<td>1 – 10</td>
<td>Final Exam</td>
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Suggested Instructional Schedule Lab:

<table>
<thead>
<tr>
<th>Week</th>
<th>Student Learning Outcomes</th>
<th>Content to be Covered</th>
<th>Student Assignments/Supplementary Material (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1 - 15</td>
<td>Lab: Introduction; Library Visit; Discuss projects</td>
<td>Rite in Rain™ pad</td>
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<tr>
<td>2.</td>
<td>1, 2, 4, 5</td>
<td>Lab: Stream Ecology Field Trip</td>
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<td>3.</td>
<td>1, 2, 4, 5</td>
<td>Analyze Stream Data</td>
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<td>4.</td>
<td>1, 2, 5, 7</td>
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<td>5.</td>
<td>2, 3, 4, 6, 8, 10</td>
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<td>6.</td>
<td>3, 4</td>
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<td>7.</td>
<td>2, 4, 5, 6, 8, 10</td>
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<td>8.</td>
<td>1, 3, 4, 6, 8, 10</td>
<td>Lab: Wildlife Management Area</td>
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<td>9.</td>
<td>3</td>
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<tr>
<td>10.</td>
<td>1 - 15</td>
<td>Student Presentations</td>
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<td>11.</td>
<td>1 - 15</td>
<td>Student Presentations</td>
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<td>14.</td>
<td>1 - 15</td>
<td>Student Presentations</td>
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