

Course Outline

**Course Title: Introduction to Environmental Science** 

Course #: EVS 100-30

**Course Item #:** 1380

Semester: Spring 2017 (Jan. 17 to May 13, 2018)

Semester Hours: 3.0

Class Meeting Times—Day/Time: Online

Instructor: Mr. Paul Maywood

**Instructor's Contact Information**: <u>pmaywood@mcc.commnet.edu</u> (note that this is a Manchester email address!) - Attachments are NOT accepted. I will generally be able to respond to email requests within 24-48 hours. If you use the Course Message system within Blackboard, your response time will be much quicker.

# **VERY IMPORTANT:** If you are using commnet to email me for help or information please use the following format in your subject line:

#### EVS 100 [your name] HELP

Phone Contact: (860) 975-8119 (leave message). Email will get you a faster response.

#### **Course Prerequisites: None**

**Scope of Course:** EVS\*100, Introduction to Environmental Science, CRN 1380. The study of the effects of humans on the Earth's natural systems. Three hours lecture per week. As an introduction to environmental studies, students are helped to develop understanding of the pattern and process in the Earth's systems, the various ways in which environmental issues have developed and been perceived, and the nature of the interactions between people and Earth systems. This unit should benefit anyone interested in global environmental issues, and provides a background for upper level units in environmental studies.

**Required Text:** Withgott and Laposata, 2017, Environment – The Science Behind the Stories, 6<sup>th</sup> ed., Pearson ISBN-10: 0-134-20488-3, ISBN-13: 978-0-134-20488-8. Note: Use previous editions at your own risk.

Also Required: calculator, appropriate field clothing for optional field trips. Access to a scanner will be helpful but is not required.

#### Evaluation Criteria (Grading):

The following factors will make up your grade (see breakdown below):

- 1. 35% exams
- 2. 15% quizzes
- 3. 30% homework assignments
- 4. 20% discussions

Grading Scale:

eraanig ebalor			
A 93-100	B 83-86.9	C 73-76.9	D 63-66.9
A- 90-92.9	B- 80-82.9	C- 70-72.9	D- 60-62.9
B+ 87-89.9	C+ 77-79.9	D+ 67-69.9	F <60

Grades for each assignment will be posted in Blackboard. It is the responsibility of the student to inform the instructor of any discrepancy as soon as possible. Course averages and final grades are also posted in the Blackboard gradebook at the conclusion of the semester.

#### **Course Components**

- **Announcements:** This tool will be used to communicate any change or important information about assignments, any change in schedule, or to tell you about upcoming field trips, special events of interest, or exam details.
- Learning Modules: Everything you need to do can be accessed here. For example, the Week 1 module contains two short reading assignments, a PowerPoint for Chapter 1, a discussion, and a short assignment. Everything in each module must be completed by the specified late Sunday night deadline. You have one week to complete all items in the Learning Module. Therefore, it is not advisable to wait until Sunday night to complete your work, due to potential computer problems, internet glitches, family issues, etc.!
- **Exams (30% of final grade):** Four timed exams will be given throughout the semester, covering five chapters each. These exams are objective exams with emphasis on concepts and applications and may be accessed from the learning modules for each week. Exams will be available for a seven-day period and must be completed by the specified Sunday night deadline. Questions may be true/false, multiple choice, multiple-multiple choice, fill-in-the-blank, matching, short answer, essay and/or critical thinking. Questions will be made up from quiz questions, lecture notes, the text, outside readings, and/or homework assignments. The lowest exam score will NOT be dropped. After the exam, answers and grades will be released; therefore, missed exams cannot be made up. In addition, no extensions will be permitted. Answers submitted via email will not be accepted. Some questions from the subject matter covered by a prior exam may appear on future exam(s). The last exam is not cumulative and will carry the same weight as the other exams.
- **Quizzes (15% of final grade):** Ten timed quizzes will be given. Quizzes will be available for a seven-day period and must be taken by the specified late Sunday night deadline. Questions may be true/false, multiple choice, multiple-multiple choice, fill-in-the-blank, matching, short

answer, essay and/or critical thinking. Questions will be generated from lecture notes, the text, and/or outside readings and may be accessed from the learning modules for the week. Your lowest quiz score will be dropped. Missed quizzes cannot be made up.

- Assignments (35% of final grade): Nine assignments will be given. Assignments must be submitted by the specified late Sunday night deadline. Assignments can be accessed from the learning modules. All of the assignments are timed but you should find that there is plenty of time to complete your work during the time provided. If you have issues with your assignment it is vital to *inform your instructor before the deadline*. You know what the deadlines are, don't be late! Missed homework assignments cannot be made up and you will receive a zero for any outstanding work. If you know you will be late with any assignment for any reason, *please notify the instructor beforehand*.
- Discussions (20% of final grade): Four discussions will be assigned and may be accessed from the learning modules or the discussions button on the left-hand toolbar. Your discussion/reply must be submitted by the specified late Sunday night deadline. Students are to provide **substantive** feedback on discussion topics. This will be evaluated based on relevance, readability, the use of correct spelling and complete sentences as well as number of words. Discussions will need to be a minimum of 250 words and replies to others' posts will need to reach a 150-word minimum, unless otherwise directed. If you meet only the minimum word requirement, you may receive a C. It is to your advantage to be able to provide content that expresses your originality and understanding of the relevant issues to beef your grade up to an A. You must also provide your discussion with a suitable title, one that indicates the content therein. One discussion and one response will be submitted for each topic, except Discussion 1 which will be one discussion only. Your reply also needs to be substantive and not just a rehash of your post. WARNING: The discussion is an opportunity to state where YOU stand on the issues. Copying off the internet or from another student's discussion, intentional or otherwise, will result in a grade of zero for the discussion and you may be referred to the Dean's Office for further disciplinary action (see college guidelines under plagiarism below). Any repeated violation of this policy will result in a grade of F for the course. For each discussion grade, 60% will be based upon the discussion post and 30% upon the reply, with 10% for the title. Point penalties will apply for untrue statements or profanities, direct or otherwise.

Early Release: If you know you will be unable to complete your work for a particular week, please notify your instructor *BEFOREHAND*. Your work may be released early upon request. Thus, there is some flexibility on the front end of the schedule, but not the back end. *Due dates/deadlines are firm*.

#### Success in this course will require:

**Strong discipline and a desire to succeed**. You will need to log in to Blackboard often (typically, at least several times per week), motivating yourself to meet the requirements for success. Being able to navigate in Blackboard will be *critical*.

**Ability to work well independently**. You'll develop the support of your fellow students all taking the same course together, but it will be different than a typical classroom environment. If you work well independently, your chance of success is higher.

**Computer Savvy**. If you're not familiar with the internet and email communication, we recommend that you take a computer enrichment class prior to enrolling in this course. Faculty assume you know how to access and send data on the internet.

**Course Schedule and Text Readings:** This course schedule is a best estimate and deviations may occur due to unforeseen circumstances. *This schedule is subject to change.* 

Week	Date	Торіс	Reading	Assignments
1	1/17-	Introduction, Critical Thinking	Other	Purchase text
	1/21/2018	Methods of Science	Readings,	Discussion 1: Introduction
		Science and Sustainability	Chap. 1	Assignment 1:
				Ecological Footprint
2	1/22-	Earth's Physical Systems	Chap. 2	Week 2 Quiz (Chap 2)
	1/28			
3	1/29-	Evolution, Biodiversity and Population	Chap. 3	Week 3 Quiz (Chaps 3-4)
	2/4	Ecology	Chap. 4	Discussion 2: Biodiversity
		Species Interactions and Community		Assignment 2: Food Webs and
		Ecology		Species Interactions
4	2/5-	Environmental Systems and	Chap. 5	Exam 1 (Chaps 1-5, Critical
	2/11	Ecosystem Ecology		Thinking, Scientific Method)
5	2/12-	Human Population	Chap. 8	Week 5 Quiz (Chap 8)
	2/18			Assignment 3: Population
6	2/19-	The Underpinnings of Agriculture	Chap. 9	Week 6 Quiz (Chaps 9-10)
	2/25	Making Agriculture Sustainable	Chap. 10	Assignment 4: Soil Texture
		5 5		Discussion 3:
				GMOs and Food
7	2/26-	Forests, Forest Management and	Chap. 12	Week 7 Quiz (Chap 12)
	3/4	Protected Areas	1	
8	3/5-	The Urban Environment:	Chap. 13	Exam 2 (Chaps 8-10,12-13)
°	3/11	Creating Sustainable Cities	0	(
	3/12-3/18	Spring Break - NO CLASSES		
9	3/19-	Freshwater Systems and Resources	Chap. 15	Week 9 Quiz (Chap 15)
Ŭ	3/25			Assignment 5: Surface Water
				and Groundwater
10	3/26-	Marine and Coastal Systems	Chap. 16	Week 10 Quiz (Chap 16)
-	4/1	and Resources		
11	4/2-	The Atmosphere, Air Quality and	Chap. 17	Week 11 Quiz (Chap 17)
	4/8	Pollution Control		Assignment 6: Ozone Depletion
				and Global Warming
12	4/9-	Global Climate Change	Chap. 18	Exam 3 (Chaps 15-18)
	4/15			Discussion 4: Climate
				Change
13	4/16-	Fossil Fuels, Sources, Uses, Impacts,	Chap. 19	Week 13 Quiz (Chaps 19-20)
-	4/22	and Conservation	Chap. 20	Assignment 7: Switch! Part 1
		Conventional Energy Alternatives		5
		Last Day to Withdraw Apr. 16		
14	4/23-	New Renewable Energy Alternatives	Chap. 21	Week 14 Quiz (Chap 21)
	4/29	5,		Assignment 8: Switch! Part 2
15	4/30-	Managing Our Waste	Chap. 22	Week 15 Quiz (Chaps 22-23)
	5/6	Minerals and Mining	Chap. 23	Assignment 9:
		5		Connecticut Mining
16	5/7-	Review and take Exam 4		<b>Exam 4</b> (Chaps 19-23)
	5/13			
				1

### Above schedule is subject to change!

#### **Course Requirements and Online Learning**

Each student will be required to read and study all text and lecture materials each week. There may be additional materials to enhance understanding of each area covered for the student to complete each week.

Rules for online dialogue:

- 1) Always be polite.
- 2) Try to make positive comments, even if you do not fully agree with the instructor or other students.
- Do not give out any personal data. You may email Mr. Maywood or other students through BB Learn. Therefore, there is no need to give out your personal email address to any other student.
- 4) Access your course shell at least 2 to 3 times a week. There is a significant amount of reading, homework assignments and assessments during the semester.

#### Learning Outcomes

Generally, the student should become familiar with the following:

- 1) Define and describe some of the basic principles and fundamental concepts of the planet Earth in the context of its environment and our human impact.
- 2) Discuss the historical development of some of the principles and theories in understanding our environment and our impact on it.
- 3) Discuss and use some of the various methods and apparatus used in observing and measuring various physical and chemical phenomena of our environment.
- 4) Apply analytical and problem-solving techniques to homework exercises, including the use of software for purposes of observation and data retrieval.

Primary Course Goals:

- 1) Encourage a sense of awe and an appreciation of the topics investigated in environmental science.
- 2) Facilitate student understanding of the scientific method and provide opportunities for their practice in its use.
- 3) Develop critical thinking and reasoning skills—emphasis on the predicting/testing nature of science.

Secondary Course Goals:

- 1) Provide students with a moderately comprehensive introduction to topics and results in environmental science.
- 2) Provide students with opportunities to learn, and use, quantitative reasoning skills.

How this course addresses MxCC Core Competencies:

 Communication Skills: Students are encouraged to apply verbal communication skills in discussing problems and questions with instructors and fellow students. Written communication skills will be exercised in completing homework and classroom assignments.

- Conceptual/Critical Thinking Skills: Critical thinking skills will be defined and discussed with each lesson. In addition, students will be utilizing critical thinking skills in their homework.
- 3) Technological Literacy: Students will be required to search various websites, compile information to answer questions and document their work.
- 4) Information Literacy: Information literacy skills will be utilized as noted in point 3— Technological Literacy.
- 5) Quantitative Reasoning: The student will learn to appreciate some of the large and small scale phenomena associated with Earth systems. This will be limited to simple calculations and processes outlined in lectures.
- 6) Understanding of Diversity: Great discoveries in the natural world have been made by persons of all ethnicity, race, culture, religion and natural origin. Discussions will note this diversity.
- 7) Values, Ethics and Responsible Citizenship: Where applicable, the course will make note of ethics and legal responsibilities of scientists. Students will also be apprised of the social responsibilities that scientists take on, particularly environmentalists.
- 8) Aesthetic Perspective: Students will be able to appreciate the symmetry and beauty of nature and how the scientific method is used to help understand our environment in a rational sense.

#### Policies

Makeups: As stated previously, there are no makeups for missed quizzes or exams. Exceptions MAY be made for emergencies when the instructor is notified *IN ADVANCE*.

Grading: The College uses the following grades and quality points:

A = 4.0	B = 3.0	C = 2.0	D = 1.0
A- = 3.7	B- = 2.7	C- = 1.7	D- = 0.7
B+ = 3.3	C+ = 2.3	D+ = 1.3	F = 0.0

The following have no quality points:

W (Withdrawal)	l (Incomplete)	AU (Audit)
U (Fail)	N (No Basis for Grade)	S (Pass)

Withdrawal: See the MxCC catalog for the College's policy on withdrawal dates, without penalty.

Class Expectations: Science includes good communication skills (listening, speaking and writing). Professional courtesy and respect is expected from all participants of the class. It is also important to be safe, courteous and watch out for each other during field trips.

### IMPORTANT COLLEGE POLICIES!! PLEASE READ CAREFULLY!

For information about the college's policies and procedures regarding academic honesty, accessibility/disability services, attendance, audio-recording in the classroom, grade appeals, plagiarism, religious accommodations, weather and emergency closings, and more, please go to the following website: <a href="http://www.mxcc.edu/catalog/syllabus-policies/">www.mxcc.edu/catalog/syllabus-policies/</a> or scan the QR code with your smart phone. Also, please become familiar with the policies regarding nondiscrimination, sexual misconduct, and general student conduct at the following website: <a href="http://www.mxcc.edu/nondiscrimination/">www.mxcc.edu/nondiscrimination/</a>.



#### NON-DISCRIMINATION STATEMENT

Middlesex Community College does not discriminate on the basis of race, color, religious creed, age, sex, national origin, marital status, ancestry, present or past history of mental disorder, learning disability or physical disability, sexual orientation, gender identity and expression or genetic information in its programs and activities. In addition, the College does not discriminate in employment on the additional basis of veteran status or criminal record.

The following people have been designated to handle inquiries or complaints regarding nondiscrimination policies and practices:

- Primary Title IX Coordinator Dr. Adrienne Maslin Dean of Students/Title IX and Section 504/ADA Coordinator amaslin@mxcc.edu; 860-343-5759; Founders Hall Room 123|
- Secondary Title IX Coordinator Ms. Queen Fordham Coordinator of the Meriden Center Welcome Desk qfordham@mxcc.edu; 203-608-3011

ADA Accommodations: Students with physical or learning disabilities who may require accommodations are encouraged to contact the Counseling Office. After disclosing the nature of the disability, students are urged to discuss their needs with individual instructors. This should be done at the beginning of each semester. Instructors, in conjunction with appropriate college officials, will provide assistance and/or accommodations only to those students who have completed this process.

Religious Accommodation: If your religious obligations conflict with the course calendar requirements, and if you wish to request an accommodation, you must make your request in writing <u>prior to the date of the assessment or activity you will miss</u> and preferably at the beginning of the semester. When requesting a make-up quiz, test, exam, assignment, or activity, state the reason for your request and the date(s) on which your religious obligation(s) will conflict with the course calendar requirements. Also, if your religious obligation/holiday is unfamiliar to your instructor, you may be asked to provide a calendar which shows the published date(s) of your religious observance(s) or holiday(s).

Inclement Weather: In the event of inclement weather either before the start of a day when classes are in session or during the *school day, you may check for information on delayed openings, college closings, class cancellations, etc.* by listening to the radio and television stations listed below. Additionally, a message will be posted on the MxCC website at

<u>www.mxcc.commnet.edu</u> and an announcement made on the college's main phone number, (860) 343-5800. (When calling the main phone number, be sure to choose option 1 from the menu for school closings.) If classes are already in session, everyone on campus will be notified of any changes. Decisions to cancel classes or close the college early will be made as soon as practicable.

Radio Stations WMRD 1150 am WDRC 102.9 fm and 1360 am WMMW 1470 am WRCH 100.5 fm WTIC 1080 am, 96.5 fm WZMX 93.7 fm WELI 960 am, WKCI 101 fm Television Stations WFSB - 3 WTNH - 8 WVIT - 30

Off Campus Sites:

The MxCC Meriden Center will comply with the Middletown campus policy. Exception: In the event of extreme weather only in the Meriden area and the Middletown campus determines to hold classes, the decision to cancel classes at the Meriden Center will be determined by the MxCC Meriden Center Director and the Dean of Finance & Administration.

The Old Saybrook off campus site will comply with the Middletown campus policy. Exception: In the event of extreme weather only at the off campus site, the decision to hold or cancel classes at this extension center will be made by our campus extension program director. The number for the Continuing Education Office is (860) 343-5865.

## Note: Off campus sites are ultimately subject to the cancellation policy of the school in which MxCC holds classes.



