

COURSE: Integrated Science and Technology (IST) 320 The Nature of Environmental Problems

ONLINE CREDIT HOURS: 3 Spring, 2014 Section 201 CRN 4671

No prerequisites required.

Instructor: Samuel T. Colvin Office – 111 Morrow Library Phone: (304) 696-5432

E- mail: colvin8@marshall.edu This is the only e-mail address to which I respond. Please do not send e-mails to any other address or through forums.

Because of the phone system, I can only return local phone calls and often cannot return some cell phone calls. I normally check and return phone calls and e-mails only when on campus, but I do respond if at all possible.

I strive to respond to phone calls and e-mails within 24 hours of receipt and will respond if at all possible.

I am scheduled to teach the following classes this semester:

IST 111 Section 202 CRN 3064

Classes –9:30 a.m. to 10:45 a.m. Tuesdays and Thursdays Room 200 Science Building

Labs - 8 a.m. to 9:50 a.m. Wednesdays Room 200 Science Building

IST 120 Section 201 CRN 4307 – 11:00 a.m. to 12:15 p.m. Tuesdays and Thursdays Room 200 Science Building

IST 321 Section 201 CRN 3478 – 12:30 – 1:45 p.m. Tuesdays and Thursdays Room 200 Science Building

IST 320 Section 201 CRN 4671 – ONLINE

OFFICE HOURS: 10 a.m. to 12:45 p.m. Wednesdays

OFFICE HOURS BY ADVANCE APPOINTMENT ONLY: Tuesdays and Thursdays 1:45 p.m. to 2:45 p.m. and Wednesdays 12:45 p.m. to 2:45 p.m. I will not be in the office at 111 Morrow Library during these times unless appointments have been made in advance.

Students are encouraged to talk with me in person before class, after class or between scheduled classes. Questions can also be asked by email or phone message.

I AM NORMALLY NOT ON CAMPUS ON MONDAYS, FRIDAYS, SATURDAYS OR SUNDAYS.

Schedule

Week 1 starting 1/13 - Students should review syllabus in the course content on MU Online. All units will be posted on MU Online by the end of the week. Units may be submitted as completed by students.

Week 2 starting 1/20 - Practice Unit - Optional submission. Not graded. Instructor comments provided to those who submit.

Week 3 starting 1/27 - Unit 1 - Sustainability Principles, Discussion on practice unit

Week 4 starting 2/3 - Unit 2 - Water, Discussion on unit 1

Week 5 starting 2/10 - Unit 3 - Land, Discussion on unit 2

Week 6 starting 2/17 - Unit 4 - Technology, Discussion on unit 3

Week 7 starting 2/24 - Unit 5 - Business, Discussion on unit 4

Week 8 starting 3/3 - Unit 6 - Population, Discussion on unit 5

Week 9 starting 3/10 - Discussion on unit 6

Spring Break

Week 10 starting 3/24 - Unit 7 - Natural Cycles and Recycle

Week 11 starting 3/31 - Unit 8 - Huntington 2025 Plan, Discussion on unit 7

Week 12 starting 4/7 - Unit 9 - Energy, Discussion on unit 8

Week 13 starting 4/14 - Unit 10 - Biodiversity, Discussion on unit 9

Week 14 starting 4/21 - Discussion on Unit 10

Week 15 starting 4/28 - Last class discussion, class ends, no final exam

COURSE MATERIALS AND TEXT:

Links to suggested videos will be provided. The required text will be:

TITLE: Taking Sides: Clashing Views in Sustainability AUTHOR: Robert Taylor COPYRIGHT YEAR: 2013 Second Edition PUBLISHER: McGraw-Hill ISBN: 978-0073514536

Course Learning Outcomes

1. Analyze the size and scope of environmental problems.
2. Generate possible solutions to selected environmental problems by applying the scientific method.
3. Evaluate proposed solutions using objective criteria selected by the student.
4. Identify and describe preferred solution(s).
5. Predict possible outcomes if the preferred solution(s) are implemented.

6. Plan and recommend appropriate action(s) to improve the current status.

How the outcomes are practiced: practice unit, instructor responses through online discussions and in answering email questions

How the outcomes are assessed – student submissions

Units with text chapters and organized by learning outcome:

1. Analyze the size and scope of environmental problems.

Unit 1 Sustainability Principles – Text Introduction and Chapters 1, 2, 3

Unit 2 Water- Text Chapter 12

Unit 3 Land – Text Chapter 16

2. Generate possible solutions to selected environmental problems by applying the scientific method.

Unit 4 Technology – Text Chapters 4, 6, 8

3. Evaluate proposed solutions using objective criteria selected by the student.

Unit 5 Business – Text Chapters 10, 18, 19

4. Identify and describe preferred solution(s).

Unit 6 Population – Text Chapter 7

Unit 7 Natural Cycles and Recycle

5. Predict possible outcomes if the preferred solution(s) are implemented.

Unit 8 Huntington 2025 Plan – Text Chapters 11, 20

6. Plan and recommend appropriate action(s) to improve the current status.

Unit 9 Energy – Text Chapters 5, 14, 17

Unit 10 Biodiversity – Text Chapters 13, 15

Grading:

10 unit submissions each worth a maximum of 100 possible points may be submitted. A total of 1000 points is possible. Online discussions will be available, but participation is voluntary and not graded.

Percentages and Points

Grades: A 90-100% 900 to 1000 points

B 80-89% 800 to 899 points

C 70-79% 700 to 799 points

D 60-69% 600 to 699 points

F < 60% 0 to 599 points

POLICIES:

Plagiarism or cheating will result in no credit for that activity and may result in further University sanctions.

Work not in the prescribed format will be penalized, or at the discretion of the instructor not accepted for grading. MU Online will be the only acceptable vehicle for submission of work unless the instructor announces a different vehicle. Late submissions to MU Online will be accepted with penalty until the cutoff. After the cutoff, MU Online will not allow submissions. Please do not e-mail submissions to me because they do not then become part of the permanent record of the class.

Submissions will not be returned. Please keep copies of all work submitted.

No work received after the class ends will be graded.

Grades will be reported in MU Online allowing students to determine their grade status anytime, especially prior to course withdrawal deadlines and prior to the final. Assignments will be marked, graded and comments returned through MU Online within two weeks after the due date. It is the student's responsibility to check grades and comments (if any) to assure the proper receipt of and credit for assignments and labs. Final grades are based on the number of points earned out of 1,000. Only point calculations prepared by the instructor are official.

There is no extra credit, re-testing or scaling. At the end of the course, the instructor may, in his discretion, consider awarding extra points to a student less than five points (actual, not percentage) away from the next grade level provided that student has completed all assignments in a timely fashion.

Questions from students about the class may be asked during class or sent by e-mail to colvin8@marshall.edu.

Due dates and assignments are subject to change. Due dates will only be moved back, not forward.

Below is the current University policy related to incompletes for courses. It will be strictly followed.

"Incomplete: The grade of I (incomplete) indicates that the student has completed three-quarters of the course, but cannot complete the course for a reason that accords with the university excused-absence policy. Students must be in good standing in the class prior to requesting an incomplete. The course instructor decides whether or not an incomplete will be granted and specifies in writing what work the student must complete to fulfill the course requirements. The student has until the end of the next fall or spring semester from the date of receipt of the incomplete grade in which to complete the course, or the instructor may

establish an earlier deadline. If special circumstances exist, which prevent the student from completing the course in the prescribed time, the incomplete may be extended with approval of the instructor, the instructor's chair or division head, and the instructor's dean. If the student satisfactorily completes the course in the prescribed time he/she will receive a letter grade. If the student fails to complete the course requirements during the stipulated time, the grade of I changes to a grade of F."

- The Greenbook, Marshall University

Other University policies can be found at http://www.marshall.edu/academic-affairs/?page_id=802 (?page_id=802, note underline between page and id) and will be followed. They include:

1. Academic Dishonesty
2. Excused Absence Policy for Undergraduates
3. University Computing Service Acceptable Use
4. Inclement Weather
5. Dead Week
6. Students with Disabilities
7. Academic Dismissal
8. Academic Forgiveness
9. Academic Probation and Suspension
10. Academic Rights and Responsibilities of Students
11. Affirmative Action
12. Sexual Harassment

Student support, resources and online tutorials are listed on MU Online. Please take advantage of that assistance as needed.

IST Software Store

The IST department maintains agreements with various software publishers to provide software for its computer labs as well as for its faculty, staff, and students. Students enrolled in IST department courses are eligible to receive a variety of software applications at no cost for use in their academic endeavors. This includes many of the same applications used in IST courses. You can find this information and more on the IST Web site at <http://www.marshall.edu/isat/software/>.

Accessing the Store

Students enrolled in this course will receive an email sent to their Marshall accounts containing information on accessing the store. Students will need to complete their account registration – which involves entering their name and setting a password – in order to browse and download the software. Once completed, students can use their individual accounts to “purchase” the applications. Purchasing an application will provide a license key and a link to download an installer.

INSTRUCTOR BIOGRAPHICAL SKETCH

Sam Colvin received a bachelor's degree and a master's degree from WVU. He has taken postgraduate courses at Marshall.

Sam has worked on environmental issues since the first Earth Day in 1970. He was appointed as the first WV Youth Adviser to the newly-formed U.S. Environmental Protection Agency. As a student, he worked on a federally funded environmental education grant developing and testing course materials from elementary school to college level. He served a six month internship with the WVU Extension Environmental Education Specialist.

Sam has been employed at the city, county and state levels in West Virginia. He was an Extension Agent for two years, administrative assistant for admissions to the MU School of Medicine for six months, and the Community Development Director of Huntington for three years. He served as Executive Director of the WV Resource Recovery-Solid Waste Disposal Authority for eleven years. He was a market development representative for a major environmental company for one year. He has operated an environmental consulting business since 1990.

Sam has been a member of the WV Solid Waste Management Board and the WV Water Quality Advisory Committee. He served two years as Executive Director of the Ohio River Basin Consortium for Research and Education.

Sam's major environmental emphasis is solid waste, including recycling and composting. He is a certified yard waste facility operator and has received the National Backyard Compost training and the Compost Facility Best Management Practices training.

Sam has taught at Marshall since the spring of 2000. He has taught First Year Seminar 100, Integrated Science (ISC) 211 Living on Earth, Integrated Science and Technology (IST) 111 Living Systems, IST 120 Connections I, IST 220 Connections II, IST 320 Nature of Environmental Problems, and IST 321 Resolution of Environmental Problems. He has been involved in two Campus Compact service learning grants. He has completed Quality Matters for online teaching, critical thinking and service learning training.

Sam has completed Sustainability Awareness, Pollution Prevention and Environmental Management System training sponsored by WV Department of Environmental Protection, the National Pollution Prevention Roundtable and Bridgemont Community & Technical College.

His current research and service projects include: (1) Monitor and modify as needed the IST 320 online course; (2) Continue work on improvement of the impaired Fourpole Creek; (3) Continue evaluation of state-mandated waste reduction goal of 50%; (4) Monitor the reclamation of the former City of Huntington landfill; (5) Study the WV solid waste management system.

Sam lives in rural Wayne County, WV with his wife, Prudence. Prudence graduated from Marshall with bachelor's and master's degrees and is now retired after 34 years as an elementary teacher. They are active as volunteers in church and community activities. Sam is a volunteer assistant high school baseball coach.

They have two sons: Andrew, a 2013 graduate of the United States Military Academy and currently a second lieutenant in the Army and in training to be an engineer dive officer; and

Samuel, an Army ROTC cadet – battalion commander, a peer educator and a senior in his last semester at the University of Charleston.