COURSE: IST 321 The Resolution of Environmental Problems CREDIT HOURS: 3 Spring, 2014 Section 201 CRN 3478

12:30 p.m. to 1:45 p.m. Tuesdays and Thursdays Room 200 Science Building

Course Description: Students examine case studies of current environmental problems and propose methods of remediation. Cultural, political, economic, as well as ecological and physiographic factors are considered.

The course studies resolution of environmental problems. Particular attention is given to policies, laws and regulations.

The course includes service learning experiences for students and student involvement in community projects.

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 emails 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. Phone messages are forwarded to my University email address. I often respond to phone messages by email.

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.

COURSE CONDUCT:

Students will work in groups and/or individually to study the resolution of environmental problems. Students will gather information from various sources including the text, the Internet, other books, and contacts with resource people. Students will be informed of available environmental conferences in which they can voluntarily participate.

Course Learning Outcomes:

- 1. Students will be demonstrate critical thinking and creativity in choosing the most appropriate technology and analyze potential costs/consequences given real-world problems.
- 2. In the development of a research project, students will scientifically analyze data, evaluate and incorporate relevant research, and describe potential implications.
- 3. Students will effectively communicate in relating findings and recommendations resulting from projects.
- 4. Students will be able to formulate questions and hypotheses related to environmental issues, locate and employ appropriate evidence, design and conduct experiments, collect data, evaluate the evidence and data, and articulate conclusions that follow logically from analysis.
- 5. Students will determine the origins of core beliefs and ethical principles, evaluate the ethical basis of professional rules and standards of conducts, evaluate how academic theories and public policy inform one another to support civic well-being, and analyze complex ethical problems to address competing interests.

How Learning Outcomes Will Be Practiced

- 1. in-class activities, instructor modeling
- 2. in-class activities, instructor modeling
- 3. in-class activities, instructor modeling
- 4. in-class activities, instructor modeling
- 5. in-class activities, instructor modeling

How Learning Outcomes Will Be Assessed

- 1. individual study, service learning project, text assignments, exams
- 2. individual study, service learning project, text assignments, exams
- 3. presentations, service learning project, exams

- text assignments, service learning project, class development project, exams
- 5. service learning project, exams

CLASS DEVELOPMENT PROJECT:

The class development project will focus on sustainable city development. It will include review of Huntington's 2025 Plan looking for sustainable elements. Depending on available time, other topics such as the ones below will be covered:

- 1. Effects on housing of having nearby parks and recreation
- 2. Historic preservation requirements and opportunities
- 3. Energy-efficient houses
- 4. Green technologies in houses
- 5. Subdivision requirements
- 6. Individual or package wastewater treatment
- 7. Developing forested land for housing while preserving the forest
- 8. School quality and capacity
- 9. Crime statistics
- 10. Eliminate invasive species and landscape with native plants

SERVICE LEARNING PROJECT:

Students will be expected to spend between a minimum of 10 hours and a maximum of 20 hours on the assignments related to the service learning project.

Don't flush unused medicine community campaign

- 1. Research effects of medicines on water quality including published environmental assessments.
- 2. Research current amounts of medicines to be disposed.
- 3. Identify strategies and options for increasing public awareness about proper disposal.
- 4. Propose a campaign with estimated costs.
- 5. Develop a tool for measuring the effectiveness of the campaign.

COURSE EVALUATION:

Students will be evaluated through:

- (1) class attendance and participation (100 points) (minus 3 points for each unexcused absence);
- (2) exam one (50 points);
- (3) exam two (50 points);
- (4) individual study (250 points total) consisting of
- a. selection and outline of a study of a local or regional environmental problem using scientific references (50 points)
- b. completion of the study outlined and submission of a written report (100 points)
- c. submission of a Power Point or similar presentation and an oral presentation in class (100 points);

- (5) class development project assignments (100 points);
- (6) text assignments (200 points);
- (7) service learning project (250 points total) consisting of
 - a. Response paper one (40 points)
 - b. Response paper two (100 points)
 - c. GEAR submission (10 points)
 - d. assignments (100 points)

A total of 1000 points is possible.

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

COURSE MATERIALS AND TEXT:

Course materials may include handouts. 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

POLICIES: Students who consistently (2 or more times) come to class late may be subject to a reduction in points not to exceed a one letter grade reduction at the discretion of the instructor.

Absences will be excused only with written excuses in accordance with University attendance policy. Students are responsible to make up any work missed because of an excused absence at the next attended class after that absence. No credit will be recorded (1) unless the missed work is made up at the next attended class after the absence and (2) until the University approved excuse is received by the instructor. Only the instructor can amend this policy at his discretion in cases of extreme hardship, but is always willing to listen.

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 last exam will be graded. The course officially closes at the end of the last exam.

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.

If you need to earn a certain grade in this class for any reason (scholarship, aid, graduate school, etc.), I am willing if requested at the beginning of the semester to help you devise a personal plan to work toward the desired grade.

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, exams and activities 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. The final word on changes will be announcements in class. Due dates will only be moved back, not forward.

Schedule changes - If the instructor must change the time or place of a scheduled event (lecture or office hours), he will make every effort (1) to announce the change in a prior class, (2) to e-mail students in advance and / or (3) at a minimum to have a sign posted on the original room with the instructor's name on the sign. The same type of notification can be expected if the instructor must cancel a scheduled session.

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.

COURSE OUTLINE AND SCHEDULE

Due dates and assignments are subject to change. The final word on changes will be announcements in class. Due dates will only be moved back, not forward. Tests are in bold.

Week 1 1/14 Syllabus, get acquainted 1/16 Environmental problem solving

1/17 Last day to adjust schedule

Week 2 1/21 Environmental problem solving 1/23 Environmental problem solving,

Service Learning Pre-assessment

Week 3 1/28 Text Introduction, Service Learning Reading, Text Assignment 1

	1/30 Text Chapter 1, Response Paper 1			
Week 4	2/4 Text Chapter 2, Service Learning Project continues, Text Assignment 2			
	2/6 Text Chapter 3, Service Assignment 1			
Week 5	2/11 Text Chapter 12, Text Assignment 3	2/13 Text Chapter 16, Service Assignment 2		
Week 6	2/18 Text Chapter 4, Text Assignment 4	2/20 Text Chapter 6, Service Assignment 3		
Week 7	2/25 Text Chapter 8, Text Assignment 5	2/27 Text Chapter 10		
	Outline of study due during week 7 on 2/27 k	oy 11:59 p.m.		
Week 8	3/4 Text Chapter 18, Text Assignment 6	3/6 Text Chapter 19, Service Assignment 4		
Week 9	3/11 Text Chapter 7, Review, Service Learning Focus Group 3/13 Text Chapter 9, Exam One			
	3/10 - Noon Deadline for Mid-Term D/F Repo	orts for Freshmen		
	Spring Break			
Week 10	3/25 Text Chapter 11, Class Development Project starts, Text Assignment 7			
	3/27 Text Chapter 20, Development Assignment 1			
	3/28 – Last day to withdraw from individual	course		
Week 11	4/1 Text Chapter 5, Text Assignment 8 4/	3 Text Chapter 14, Development Assignment 2		
Week 12	4/8 University Assessment Day – Classes in session, Text Chapter 17, Text Assignment 9			
	4/10 Text Chapter 13, Development Assignment 2			
	Written report during week 12 on 4/10 by 11:59 p.m.			
Week 13	4/15 Text Chapter 15, Text Assignment 10			
	4/17 Oral Presentations, Development Assignment 3			
Week 14	4/22 Oral Presentations			
	4/24 Oral Presentations, GEAR submission, Development Assignment 4			
	Copy of Power Point presentation due during week 14 on 4/24 by 11:59 p.m.			
	Cutoff for all make-up work 11:59 p.m. on 4	/24.		
Week 15	4/29 Conclusion of Service Learning and Class Development Projects			
	5/1 Review, Service Learning Post-Assessmo	ent		
	4/28 – 5/2 Dead Week			
Tuesday 5/	/6 12:45 to 2:45 p.m. Exam Two . The course	officially closes at 2:45 p.m. on 5/6/14.		

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.