

COURSE: IST 120 Connections I CREDIT HOURS: 3 Spring, 2014 Section 201 CRN 4307

11:00 a.m. to 12:15 p.m. Tuesdays and Thursdays Room 200 Science Building

Course Description: Critical thinking course that makes connections among science, technology, and society. Students learn to do research, summarize popular and scientific articles, and design an experimental or observational study.

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. 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 Learning Outcomes:

Marshall University Critical Thinking

1. Communication Fluency: Students will develop cohesive oral, written, and visual communications tailored to specific audiences.
2. Creative Thinking: Students will outline multiple divergent solutions to a problem, develop and explore risky or controversial ideas, and synthesize ideas/expertise to generate ideas.
3. Ethical and Civic Thinking: Students will determine the origins of core beliefs and ethical principles, evaluate the ethical basis of professional rules and standards of conduct, evaluate how academic theories and public policy inform one another to support civic wellbeing and, analyze complex ethical problems to address competing interests.
4. Information Literacy: Students will revise their search strategies and employ appropriate research tools, integrate relevant information from reliable sources, question and evaluate the complexity of the information environment, and use information in an ethical manner.
5. Inquiry Based Thinking: Students will formulate focused questions and hypotheses, evaluate existing knowledge, collect and analyze data, and draw justifiable conclusions.
6. Integrative Thinking: Students will make connections and transfer skills and learning among varied disciplines, domains of thinking, experiences, and situations.
7. Intercultural Thinking: Students will evaluate generalizations about cultural groups, analyze how cultural beliefs might affect communication across cultures, evaluate how specific approaches to global issues will affect multiple cultural communities, and untangle competing economic, religious, social, or geographical interests of cultural groups in conflict.
8. Metacognitive Thinking: Students will evaluate the effectiveness of a project plan or strategy to determine the degree of their improvement in knowledge and skills.
9. Quantitative Thinking: Students will analyze real world problems quantitatively, formulate plausible estimates, assess the validity of visual representations of quantitative information, and differentiate valid from questionable statistical conclusions.

IST Department

1. In the design and development of a discipline-related project, students will demonstrate Critical Thinking and Creativity where appropriate when identifying issues and applying the most pragmatic scientific and/or technical methods.
2. Students will be effective communicators in relating findings and recommendations resulting from discipline-related projects.

How MU Learning Outcomes Will Be Practiced

1 – 9 Texts, in-class activities, instructor modeling

How IST Learning Outcomes Will Be Practiced

1. Texts, in-class activities, instructor modeling
2. Texts, in-class activities, instructor modeling

How MU Learning Outcomes Will Be Assessed

1-9 Text and class assignments, exams

How IST Learning Outcomes Will Be Assessed

1. Research papers with presentation
2. Presentations and research

Course Conduct: Students will work in groups and/or individually to make connections among science, technology, and society. Students will gather information from various sources including the texts, other books, the Internet, and other references.

The instructor is responsible to: 1. Introduce concepts and issues. 2. Model a scientific and connective approach. 3. Evaluate student submissions. 4. Make interesting and relevant presentations.

Students are responsible to: 1. Read texts 2. Participate in activities 3. Submit individual assignments and assure their proper receipt. 4. Take tests. 5. Remain interested and apply learning to life.

Required Texts:

TITLE: The New Digital Age AUTHORS: Schmidt and Cohen COPYRIGHT YEAR: 2013 PUBLISHER: Knopf Doubleday

ISBN: 9780307957139

TITLE: My Life as an Experiment AUTHOR: Jacobs COPYRIGHT YEAR: 2009 PUBLISHER: Simon & Schuster ISBN: 9781439104996

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.

Attendance is recorded.

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.

It is the student's responsibility to assure the receipt by the instructor of assignments in the prescribed format so that the work can be opened and graded. Work not in the prescribed format or not under the right assignment 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. PLEASE DO NOT SEND SUBMISSIONS BY E-MAIL.

Submission deadlines to MU Online are detailed below and will be enforced. Late submissions to MU Online will be accepted with penalty until the cutoff. After the cutoff, MU Online will not allow submissions. Submissions will not be returned. Please keep copies of all work submitted.

Grades will be reported on MU Online allowing students to determine their grade status anytime, but especially prior to course withdrawal deadlines and end of the class. Assignments and labs will be marked, graded and comments (if any) 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 700. 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, scaling, or rounding. No work received after the last exam will be graded. The course officially closes at the end of the last exam. After the class is over, please only contact me if I can be of assistance such as being a reference or if you feel there has been a point total error. Please do not contact me attempting to negotiate a better grade.

At the end of the course, the instructor may, in his discretion, consider awarding extra points to a student four points or less away from the next grade level provided that student has completed all assignments, activities, exams and labs in a timely fashion. These are actual points, not percentages.

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.

If the instructor must change the time or place of a scheduled event, 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.

Some materials used in this class may be copyrighted and should not be shared with individuals not enrolled in this course.

Below is the current University policy related to the granting of incompletes for courses. This policy 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 Evaluation: Students will be evaluated through:

Class Attendance (minus 3 points for each unexcused absence)	100 points
Class and Text Assignments	100 points
Experiment/Study	100 points
Prediction Research Paper	100 points
Presentation	100 points
Exam One	100 points
Exam Two	100 points
	Total: 700 points

Grades:	A 90-100%	630 to 700 points
	B 80-89%	560 to 629 points
	C 70-79%	490 to 559 points
	D 60-69%	420 to 489 points
	F < 60%	0 to 419 points

COURSE OUTLINE AND SCHEDULE

PLEASE NOTE: Assignments and their submission deadlines to MU Online and cutoff dates for submission are underlined, are detailed below and will be enforced. Late submissions to MU Online will be accepted with penalty until the cutoff. After the cutoff, MU Online will not allow submissions. If there is no submission properly received by the cutoff, no credit will be recorded for that assignment.

Tests are in bold. Classes

Week 1	<u>1/14</u> - syllabus, get acquainted	<u>1/16</u> – The Future
	<u>1/17</u> - last day to add/drop class	
Week 2	<u>1/21</u> – New Digital Age text Introduction	<u>1/23</u> - New Digital Age text Chapter 1
Week 3	<u>1/28</u> - New Digital Age text Chapter 2	<u>1/30</u> – New Digital Age text Chapter 3
Week 4	<u>2/4</u> – New Digital Age text Chapter 4	
	<u>2/6</u> – New Digital Age text Chapter 5	
Week 5	<u>2/11</u> – New Digital Age text Chapter 6	
	<u>2/13</u> – New Digital Age text Chapter 7	
Week 6	<u>2/18</u> - New Digital Age text Conclusion	<u>2/20</u> - Review
Week 7	<u>2/25</u> – Exam One	<u>2/27</u> – Experiment text Introduction
Week 8	<u>3/4</u> – Experiment text Chapter 1	<u>3/6</u> - Experiment text Chapter 2

- 3/6 – Prediction research paper submitted to MU Online by 11:59 pm
- Week 9 3/11 – Experiment text Chapter 3 3/13 – Experiment text Chapter 4
- 3/10 - Noon Deadline for Mid-Term D/F Reports
- Spring Break
- Week 10 3/25 – Experiment text Chapter 5 3/27 – Experiment text Chapter 6
- 3/28 - Last day to withdraw from individual course
- Week 11 4/1 – Experiment text Chapter 7 4/3 – Experiment text Chapter 8
- Week 12 4/8 – University Assessment - classes in session, Experiment text Chapter 9
- 4/10 – Experiment text Chapter 10
- 4/10 – Experiment/Study submitted to MU Online by 11:59 pm
- Week 13 4/15 – Student Presentations 4/17 – Student Presentations
- Week 14 4/22 - Student Presentations 4/24 – Student Presentations (if necessary), Review
- 4/24 – Copy of Presentation submitted to MU Online by 11:59 pm
- 4/24 - Cutoff for all make-up work and assignments at 11:59 pm. No work submitted after that time will be considered or graded.
- Week 15 4/29 – Learning Outcomes, Review 5/1 – Learning Outcomes, Review

4/28 - 5/2 - Dead Week

5/8 - **Exam Two** Thursday 10:15 a.m. to 12:15 p.m.

The course officially closes at 12:15 p.m., Thursday, 5/8/14

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 Bridgmont 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.