Marshall University Syllabus

Course Title/Number:    IST 111 Living Systems CRN 3675 Section 203  CRN 3676 Section 204

                                                                                     CRN 5689 Section 205

Credit Hours: 4

Semester/Year: Spring 2017

Days/Times/Locations: Section 203 Class 8 -915 a.m. Science 276 Tuesdays and Thursdays

                                                                Lab 930 – 1120 a.m. WAEC 2235 Tuesdays

 Lab Instructor – Kyle Tasker (tasker1@live.marshall.edu)

                                           Section 204 Class 2 – 315 p.m. WAEC 2235 Tuesdays and Thursdays

                                                                Lab 330 – 520 p.m. WAEC 2235 Thursdays

 Lab Instructor – Kyle Tasker (tasker1@live.marshall.edu)

                                           Section 205 Class 8 – 915 a.m. Science 276

                                                                Lab 930 – 1120 a.m. WAEC 2235 Thursdays

 Lab Instructor – Logan White (white539@marshall.edu)

Instructor: Samuel T. Colvin

Office: Morrow 111

Phone: 304 696 5432

E-Mail: colvin8@marshall.edu

Office Hours: Tuesdays and Thursdays 1230 – 145 p.m. By prior appointment only, 930 - 1045 a.m.

University Policies:           By enrolling in this course, you agree to the University Policies listed below.  Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on “Marshall University Policies.”  Or, you can access the policies directly by going to www.marshall.edu/academic-affairs/policies/.  Academic Dishonesty/Excused Absence Policy for Undergraduates/Computing Services Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic Forgiveness/Academic Probation and Suspension/Academic Rights and Responsibilities of Students/Affirmative Action/Sexual Harassment

**Course Description: From Catalog**

Issues of current importance related to growth in human population and the depletion of biological resources, and the remedies that science and technology provide. Related data analysis and prediction.

|  |
| --- |
| Learning Outcomes                                      How Practiced                          How Assessed |
| 1. Students will utilize the process instructor modeling, activities, lab reports, exams |
| of scientific inquiry to investigate examples, labs, text  |
| living systems from the cellular level |
| to the ecosystem level.  |
| 2. In the development of research  |
| projects and completion of activities,  |
| students will scientifically analyze instructor modeling, activities, design of experiment,  |
| data, evaluate and incorporate examples, labs, text summary of findings |
| relevant research, and describe  |
| potential implications.    |
|    |
| 3. Students will effectively communicate  |
| in relating findings and  |
| recommendations resulting from instructor presentations, lab reports, exams, design of |
| projects and activities.     examples, labs, text experiment, summary of findings |

**Text**

TITLE: Biology for the Informed Citizen  AUTHORS: Bozzone and Green

COPYRIGHT YEAR: 2014      PUBLISHER: Oxford University Press    ISBN: 978-0-19-538198-6

The textbook for IST 111 is available in the Textbook Loan Program. Students can go to the Circulation Desk in Drinko Library and check the book out in three-hour increments. Students need to present their valid student ID card, tell the librarian the name of the class and identify the book as part of the Textbook Loan Program.

**Course Requirements/Due Dates**

Lab Attendance, Participation and Completion – 15 labs, one every week

Activities – 1/26, 2/2, 2/9, 2/16, 3/2, 3/16, 3/30, 4/13, 4/20, 4/27

Design of Experiment/Study – due 3/9

Experiment/Study Summary/ Findings/Conclusions – due 4/20

Three Exams – on 2/23, 4/6, 5/4

**Grading Policy**

Grades, 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 Evaluation - Students will be evaluated through:

Lab Attendance and Participation (15@ 20 points each)                                                                   300 points

Activities (10 @ 10 points each)                                                                                                             100 points

Design of Experiment/Study                                                                                                                    150 points

Experiment/Study Summary/Findings/Conclusions                                                                           150 points

Three Exams (100 points each)                                                                                                               300 points

                                                                                                                                         Total:   1000 points possible

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 or approves a different vehicle. Submission to MU Online is required so that submissions become part of the permanent record of the class. 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.

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.

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 or re-testing. Scaling may be used at the discretion of the instructor in grading the submissions.

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.

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.

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

**Attendance Policy**

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

Attendance in lab 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.

**Contacting The Instructor**

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

person at class, during office hours or at other times in accordance with the instructor’s schedule below.

colvin8@marshall.edu 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.

*Instructor Schedule – Spring 2017*

Tuesdays and Thursdays

*Classes*

8 – 915 a.m. IST 111 Sections 203 and 205 Science 276

11 a.m. – 1215 p.m. IST 321 Section 201 WAEC 1227

2 – 315 p.m. IST 111 Section 204 WAEC 2235

IST 320 Section 201 Online only. No class meetings.

*Office Hours*

1230 – 145 p.m. Morrow 1111

By prior appointment only, 930 – 1045 a.m.

*Faculty Meetings*

9 a.m. Wednesdays

**Due Dates / Changes in Schedule / Inclement Weather**

Due dates and assignments are subject to change. 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.

If the University delays classes by one or two hours, the lecture sessions for Sections 203 and 205 will not be held that day. Holding labs for that day will be at the discretion of the lab instructor.

Lecture sessions for Section 204 will be held as scheduled unless the University cancels classes.

**Copies / Copyright**

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

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

**Purpose of Course:**

“Science is a series of interrelated questions created from past experience and observation.  We then test a series of possible outcomes to determine which outcomes are the most likely and which are not feasible.  From these tests, we attempt to predict additional outcomes or define new questions.    This course is designed to equip the students to observe and create their own questions, test them, and continue the process of scientific inquiry.” – Dr. Tom Jones

Course Conduct: Students will work in groups and/or individually to examine the world’s current environmental status. Students will gather information from various sources including the Internet, books, and other scientific references.

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

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

**Important Dates – Spring 2017**

January 9, Monday -- January 13, Friday Late registration/schedule adjustment (add-drop)

January 16, Monday Martin Luther King, Jr. Holiday - University closed

February 27, Monday, Noon Freshmen/Sophomore mid-term grades due

March 17, Friday Last day to drop an individual course

March 20, Monday -- March 25, Saturday Spring Break Classes dismissed

April 24, Monday -- April 28, Friday "Dead Week"

April 28, Friday Last day to completely withdraw from spring semester

May 4, Thursday Exam Day

May 6, Saturday, TBD at Big Sandy Superstore Arena Commencement

May 9, Tuesday, Noon Final Grades due

**Schedule of Labs and Lectures**

Week 1  1/10 – syllabus, get acquainted    1/12 – explain assignments        Lab 1

Week 2   1/17 - Earth from Space                 1/19 – Earth from Space            Lab 2

Week 3    1/24 – Chapter 1.1, 1.2, 1.3           1/26 – Chapter 1.4, 1.5, 1.6 / *Activity 1 due*      Lab 3

Week 4    1/31 – Chapter 2.1, 2.2, 2.3           2/2 – Chapter 2.4, 2.5, 2.6 / *Activity 2 due*      Lab 4

Week 5    2/7 – Chapter 3.1, 3.2, 3.3, 3.4    2/9 – Chapter 3.5, 3.6, 3.7, 3.8, 3.9 / *Activity 3* due  Lab 5

Week 6    2/14 – Chapter 4.1, 4.2, 4.3   2/16 – Chapter 4.4, 4.5, 4.6, 4.7, 4.8, 4.9 / *Activity 4* due   Lab 6

Week 7    2/21 – Chapter 5.1, 5.2, 5.3, 5.4   2/23 Chapter 5.5, 5.6, 5.7, 5.8 / *Exam One*              Lab 7

Week 8    2/28 – Chapter 6.1, 6.2, 6.3, 6.4   3/2 Chapter 6.5, 6.6, 6.7, 6.8 / *Activity 5 due*          Lab 8

Week 9  3/7 – Chapter 7.1, 7.2, 7.3   3/9 Chapter 7.4, 7.5, 7.6, 7.7 / *Design of Experiment due* Lab 9

Week 10  3/14 – Chapter 8.1, 8.2, 8.3      3/16 Chapter 8.4, 8.5, 8.6 / *Activity 6 due*      Lab 10

Spring Break  - No classes on 3/21 and 3/23

Week 11 3/28 – Chapter 9.1, 9.2, 9.3, 9.4    3/30 – Chapter 9.5, 9.6, 9.7, 9.8 / *Activity 7 due*    Lab 11

Week 12 4/4 – Chapter 10.1, 10.2, 10.3       4/6 – Chapter 10.4, 10.5 / *Exam Two*                  Lab 12

Week 13 4/11 – Chapter 11.1, 11.2, 11.3, 11.4    4/13 – Chapter 11.5, 11.6, 11.7 / *Activity 8 due*  Lab 13

Week 14  4/18 – Chapter 12.c1, 12.2, 12.3, 12.4, 12.5   4/20 – Chapter 12.6, 12.7, 12.8, 12.9, 12.10 /

                                                                                                  4/20 - *Experiment Summary due / Activity 9 due*

                                                                                                             Lab 14

Week 15  4/25 – Chapter 13.1, 13.2, 13.3              4/27 – Chapter 13.4, 13.5 / *Activity 10 due*         Lab 15

Cutoff for all work due to this point to MU Online 4/27 at 1159 p.m.

Exam Three (Final): Thursday, May 4, 2017

                                    8 – 10 a.m. Sections 203 and 205. The courses end at 10 a.m.

                                    1245 – 245 p.m. Section 204. The course ends at 245 p.m.

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 212 Energy, 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 to develop proposed new baseball field; (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 educator – 27 as an elementary teacher and 7 as a reading coach. They are active as volunteers in church and community activities. Sam is a volunteer assistant high school baseball coach.

They have two sons.

Andrew is a May, 2013 environmental engineering graduate of the United States Military Academy at West Point, an August, 2014 honor graduate of the Naval Dive School and a graduate of the Army Air Assault Course. He is currently a first lieutenant in the Army serving as an engineer dive officer and professional diver. In 2015 he returned from deployment in the Middle East.

Samuel graduated in May, 2014 with honors from the University of Charleston and was selected as Senior of the Year. He served as battalion commander of the Army ROTC combined programs for WV State, Glenville State, WVU Tech and the University of Charleston and was named Cadet of the Year. He is currently a first lieutenant in the Army serving as a military intelligence officer, is a paratrooper and graduated from the Army Reconnaissance Course in 2015. He is a licensed private pilot.​