



FISH AND WILDLIFE MANAGEMENT (FWMT)
FWMT 1040 Aquatic Ecology
COURSE SYLLABUS
Summer Semester 2019

COURSE INFORMATION

Credit Hours/Minutes: 3/3750

Campus/Class Location: Swainsboro Campus, Building 6, Room #6110

Class Meets: Monday, Tuesday 12:15 pm - 4:05 pm

Course Reference Number: (CRN): 60209

INSTRUCTOR CONTACT INFORMATION

Instructor Name: Sherry Sturgis

Professional Bio: I received my B.S. and M.S. in Biology from Georgia Southern University, with an emphasis in Ecology. I am an Ecologist, Conservationist, Wildlife Rehabilitator, and Environmental Educator.

Campus/Office Location: Swainsboro Campus, Building 6, Room #6110

Office Hours: 7:00 am – 9:00 am M-W & 8-12 TH

Email Address: [Sherry Sturgis](mailto:sherry.sturgis@southeasterntech.edu) ssturgis@southeasterntech.edu

Phone: 478-289-2303, cell (912-682-2376, text me first)

Fax Number: 478-289-2328

Tutoring Hours: By appointment only

Note: The schedule is subject to change. The weather may influence our labs. If we cannot go out in the field, we will use time wisely in class or the computer lab for project research. We will have field trips, I will let you know as soon as I know these dates.

Our lab time will be spent mostly in local aquatic systems. We still may travel out of our area. Labs are a large percentage of this course. You need to attend all labs, especially due to the fact that this is a short session. Your grade will be impacted if you miss labs. Your grade will also be affected by not participating in labs while in the field. You will not be able to do the lab summaries and receive a grade, if you are not present. Cell phone should not be out in lab, unless we are using them for class.

SOUTHEASTERN TECHNICAL COLLEGE'S (STC) CATALOG AND HANDBOOK

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's [Catalog and Handbook](http://www.southeasterntech.edu/student-affairs/catalog-handbook.php) (<http://www.southeasterntech.edu/student-affairs/catalog-handbook.php>).

REQUIRED TEXT

Ecology of Aquatic Systems by Mike Dobson, by Oxford Press

Read the chapters assigned weekly. I will also use power points in class, as well as diagrams, and articles.

I will supply diagrams and articles.

REQUIRED SUPPLIES & SOFTWARE

Pencils, paper, highlighter, field manual, boots, snake boots, muck boots, sunglasses, change of clothes, etc... Access to computer with MS Word. Requires student to be proficient in the use of Blackboard. This is a web enhanced course. Copies of PowerPoint presentations (PPTs) will be placed on Blackboard. Students are expected to access Blackboard on a regular basis.

COURSE DESCRIPTION

This course introduces ecological concepts related to aquatic resources. Topics include the river basins of Georgia, water quality testing and monitoring, stream ecology, macro invertebrates, and conservation. Upon completion, students should have an understanding of aquatic ecology and demonstrate stream sampling techniques.

MAJOR COURSE COMPETENCIES

1. Water quality
2. Water resources
3. Freshwater Ecosystems
4. Stream Ecology
5. Benthic Macro Invertebrates
6. Conservation

PREREQUISITE(S)

None

GENERAL EDUCATION CORE COMPETENCIES

Southeastern Technical College has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

STUDENT REQUIREMENTS

Students are responsible for policies and procedures included in the Catalog and Handbook. FWMT students are responsible for keeping clean, weather appropriate, dry clothing with them at all times. Failure to have appropriate accessories (waders, boots) does not excuse any student from participating in all field labs.

ATTENDANCE GUIDELINES

Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of "F" (Failing 0-59) and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an "F" in a course.

STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services.

Swainsboro Campus: [Macy Gay mgay@southeasterntech.edu](mailto:Macy.Gay@southeasterntech.edu), 478-289-2274, Building 1, Room 1208

Vidalia Campus: [Helen Thomas hthomas@southeasterntech.edu](mailto:Helen.Thomas@southeasterntech.edu), 912-538-3126, Building A, Room 108

SPECIFIC ABSENCES

Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

PREGNANCY

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please make arrangements with the appropriate campus coordinator.

Swainsboro Campus: [Macy Gay mgay@southeasterntech.edu](mailto:Macy.Gay@southeasterntech.edu), 478-289-2274, Building 1, Room 1208

Vidalia Campus: [Helen Thomas hthomas@southeasterntech.edu](mailto:Helen.Thomas@southeasterntech.edu), 912-538-3126, Building A, Room 108

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **MAY NOT** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

WITHDRAWAL PROCEDURE

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of "F" (Failing 0-59) being assigned.

Informing your instructor that you will not return to his/her course, does not satisfy the approved withdrawal procedure outlined above.

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. A grade of "W" will count in attempted hour calculations for the purpose of Financial Aid.

MAKEUP GUIDELINES (Tests, quizzes, homework, projects, etc.)

Make-up tests and assignments only with a written excuse, approved by instructor. No labs will be made up and no alternative assignment given, only in special circumstances determined by instructor. No late work will be taken.

No makeup labs will be available. If a student misses a test, a grade of zero will be assigned. Only students with extenuating circumstances (who contact the instructor on the day of the test regarding their absence) will be allowed to take a makeup test, which will replace the zero. Extenuating circumstances are determined at the instructor's discretion. Unless otherwise scheduled with the instructor, it is expected that the missed test will be taken the next day, scheduled outside of regular class time. It is within the instructor's discretion to accept or reject late assignments. **Failure to take the final exam/practicum at the end of the semester will result in a grade of zero. No make-up exams are allowed.** Students are expected to complete all work.

ACADEMIC DISHONESTY POLICY

The Southeastern Technical College Academic Dishonesty Policy states that all forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline. The policy can also be found in the Southeastern Technical College Catalog and Handbook.

PROCEDURE FOR ACADEMIC MISCONDUCT

The procedure for dealing with academic misconduct and dishonesty is as follows:

1. First Offense

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

2. Second Offense

Student is given a grade of "WF" (Withdrawn Failing) for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

3. Third Offense

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of third offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

STATEMENT OF NON-DISCRIMINATION

The Technical College System of Georgia (TCSG) and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member, or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, federally financed programs, educational programs and activities involving admissions, scholarships and loans, student life, and athletics. It also applies to the recruitment and employment of personnel and contracting for goods and services.

All work and campus environments shall be free from unlawful forms of discrimination, harassment and retaliation as outlined under Title IX of the Educational Amendments of 1972, Title VI and Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act of 1967, as amended, Executive

Order 11246, as amended, the Vietnam Era Veterans Readjustment Act of 1974, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities Act of 1990, as amended, the Equal Pay Act, Lilly Ledbetter Fair Pay Act of 2009, the Georgia Fair Employment Act of 1978, as amended, the Immigration Reform and Control Act of 1986, the Genetic Information Nondiscrimination Act of 2008, the Workforce Investment Act of 1998 and other related mandates under TCSG Policy, federal or state statutes.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer	Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 st Street, Vidalia Office 108 Phone: 912-538-3126 Email: Helen Thomas hthomas@southeasterntech.edu	Lanie Jonas, Director of Human Resources Vidalia Campus 3001 East 1 st Street, Vidalia Office 138B Phone: 912-538-3230 Email: Lanie Jonas ljonas@southeasterntech.edu

ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College’s website.

ACCESS TO TECHNOLOGY

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and Banner Web via the mySTC portal or by clicking the Current Students link on the [Southeastern Technical College \(STC\) Website \(www.southeasterntech.edu\)](http://www.southeasterntech.edu).

TECHNICAL COLLEGE SYSTEM OF GEORGIA (TCSG) GUARANTEE/WARRANTY STATEMENT

The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.

GRADING POLICY

Assessment/Assignment	Percentage
Lab and lab summaries	20%
Exams	20%
Final Exam	20%
Articles/assignments	20%

Assessment/Assignment	Percentage
Project	10%
Participation in discussions & lab activities	10%

GRADING SCALE

Letter Grade	Range
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

FISH AND WILDLIFE MANAGEMENT
FWMT 1040 Aquatic Ecology
Summer Semester 2019 Lesson Plan

Date/Week	Chapter/Lesson	Topics, Lab/field days	Assignments & Tests Due Dates	Competency Area
Week 1 May 14	Chapter 1 in textbook Intro to Aquatic Ecology Water Quality testing; dissolved oxygen, pH, temperature	Syllabus, Policies/Procedures for lab Introduction to Aquatic Ecology Types of aquatic ecosystems Discuss labs Discuss project No lab week 1	Read section on the aquatic environment water system in textbook Review & study weekly PowerPoints (PPTs) No Lab summary	1,2 a,b,c,
Week 2 May 20th	Chapters 1, 2 textbook Living in Aquatic systems in textbook Hydrology cycle Rivers and lakes in Georgia	What is the hydrology cycle? Use the hydrology diagram Name and label the major rivers and lakes in Georgia. Discuss inter-basin water exchange Perform Water testing lab in the field for water quality on dissolved oxygen, pH, temperature, and TDS Outdoor Lab 1 River and streams	Read section on Living in Aquatic systems Review & study weekly PowerPoints (PPTs) Lab summary 1 due Assignment in class on maps of hydrology cycle, Georgia rivers and lakes Assignment 1 on a river in Georgia Review for Test 1	1,2 a,b,c,

Date/Week	Chapter/Lesson	Topics, Lab/field days	Assignments & Tests Due Dates	Competency Area
Week 3 May 27th	<p>Chapters 2, 3 in textbook</p> <p>Discuss freshwater ecosystems</p> <p>Lotic and lentic</p> <p>Vertical zones of aquatic life</p> <p>Stream orders</p>	<p>Discuss freshwater ecosystems and the aquatic food web</p> <p>Discuss aquatic lotic and lentic, food web, and stream orders (Review diagrams for aquatic ecosystem and stream orders)</p> <p>Outdoor lab 2 Durden's Pond and spillway</p>	<p>Read section on Rivers</p> <p>Review & study weekly PowerPoints (PPTs)</p> <p>Assignment on stream order in class</p> <p>Test 1</p> <p>Research article 1 due (water exchange)</p> <p>Assignment 1 due (A river in Georgia)</p> <p>Lab summary 1 due</p> <p>Article review of streams</p>	<p>3,4 a,b,c</p>
Week 4 June 3rd	<p>Chapter 4 in textbook</p> <p>Stream dimensions</p> <p>Rosgen stream classification</p> <p>Chemical and physical properties of streams</p>	<p>Discuss the four dimensions of streams</p> <p>Rosgen classification of streams</p> <p>Chemical properties of streams</p> <p>Physical properties of streams</p> <p>Outdoor lab 3 McKinney's Pond and natural spring system</p>	<p>Read section on estuaries</p> <p>Review & study weekly PowerPoints (PPTs)</p> <p>Assignment 1 due (a Georgia stream)</p> <p>Lab summary 2 due</p>	<p>3,4 a,b,c,</p>

Date/Week	Chapter/Lesson	Topics, Lab/field days	Assignments & Tests Due Dates	Competency Area
Week 5 June 10th	Chapter 7 in textbook (We are not covering the chapters, 5-6 on Oceans in textbook) Benthic Macro Invertebrates Bio-indicators Modes of feeding of aquatic fauna Sampling techniques	Physical properties of streams Identifying Aquatic Invertebrates Discuss the role of organisms as Bio-indicators Discuss the modes of feeding of aquatic fauna Perform sampling techniques Outdoor lab 4 Cannonochee Creek system	Read the section on lakes and ponds Review & study weekly PowerPoints (PPTs) Article on Bio-indicator species Lab summary 3 due Review test 2	3,4 a,b,c,
Week 6 June 17th	Chapter 8 in textbook Modes of feeding of aquatic fauna Sampling techniques	Lake and pond Ecology Discuss the modes of feeding of aquatic fauna Perform sampling techniques Outdoor lab 5 Hamburg State Park Shoal's river system	Read section on wetlands Review & study weekly PowerPoints (PPTs) Assignment 3 due (A Bio-indicator species) Lab summary 4 due Review test 2 Test 2	5,6 a,b,c,

Date/Week	Chapter/Lesson	Topics, Lab/field days	Assignments & Tests Due Dates	Competency Area
Week 7 June 24th	Chapter 9 In textbook Benefits of wetlands Pollution Conservation Of rare and endangered species	Conservation Discuss the types of pollution Importance of maintaining clean water Protected and endangered fish species Conservation plan for rare and endemic fish species Outdoor lab 6 Magnolia Springs	Read section on the aquatic system in chapter 9 Review & study weekly PowerPoints (PPTs) Article on wetlands and Mercury Projects due (topic of choice, approved by instructor) Lab summary 5 due	6 a,b,c,
Week 8 July 1 st Holiday (Student Break)	n/a	n/a	n/a	n/a
Week 9 July 8	Chapter 9 continues in textbook Pollution Conservation Of rare and endangered species Statewide action plan	Protected and endangered fish species Conservation plan for rare and endemic fish species Statewide action plan Outdoor lab 7 Benthic invertebrate sampling various sites	Read section on the aquatic system Assignment 6 due (wetlands and Mercury) Review for final Lab summary 6 due	5,6 a,b,c,
Week 10 July 15th	Review of finals	Projects No lab Review Finals	Projects	n/a
Week 11 July 22nd	Summer Semester Ends July 24th-Finals		Finals	

COMPETENCY AREAS:

1. Water quality
2. Water resources
3. Freshwater Ecosystems
4. Stream Ecology
5. Benthic Macro Invertebrates
6. Conservation

GENERAL CORE EDUCATIONAL COMPETENCIES:

- a) The ability to utilize standard written English.
 - b) The ability to solve practical mathematical problems.
 - c) The ability to read, analyze, and interpret information.
- Labs are weather dependent. Students are responsible for being prepared for all labs with weather appropriate clothing. Waders or boots are to be worn in labs. Students are encouraged to have a clean, dry set of clothing with them at all times. Clean, dry clothing may be kept in cabinet provided in storage room of FWMT lab.
 - PowerPoint presentations will be placed on Blackboard. Students are responsible for studying these PowerPoints. Notifications and announcements will be placed on Blackboard. **Students are responsible for checking Blackboard daily.**
 - **LESSON PLAN SUBJECT TO CHANGE AT INSTRUCTOR'S DISCRETION**