Three Rivers Community College

Long Island Sound Ecology –ENV K 208 TR 12:30 pm – 01:45 pm

Spring 2018

Instructor; Donald W. Gerwick, P.E., L.S.

Office: D 205W; 205.6 Office Hours: T - 1:55 pm - 3:25 pm R - 9:20 am - 10:50 am

Additional Times by Appointment

Email dgerwick@trcc.commnet.edu

Text: This Fine Piece of Water – An Environmental History of Long Island Sound Anderson, Tom

Required for Course: Text noted above and Additional Materials: 2002 CT Erosion and Sedimentation Control Manual which may be obtained "on line" as a free PDF document from; www.ct.gov/dep

The course content is intended to provide an historical overview of Long Island Sound, and its impacts, cultural, economic and physical, starting with an exploration of the history of the sound, and the vast abundance of its resources. A brief geological introduction with regards to the formation of the Sound the course traces its history from the first native residents through to the late 20th century, when in the late 1980's the western portion of the Sound became a virtual "dead" zone. Using the text as a backdrop, the course will explore a variety of aspects of the Sound, its current conditions and its future into the 21st century.

Through additional assignments students will also explore the impact that water, as a fundamental resource, will impact the 21st century. Assignments for each chapter shall be 3-4 pages in length, and shall be based on research by students with regards concepts associated with the main topics of each chapter.

Students are responsible for reading the assigned sections below. Students should be prepared to discuss assigned "exercise problems" in class. "Homework" problems shall be completed outside of class and be turned in as hard copies for grading as described after the outline of material to be covered. Additional assignments may periodically be added by the instructor.

Each chapter and subsequent assignments shall consist a 2-3 page report (no longer, but does not count any cover page(s) or addendums or other information), based on research, either on line and/or other hard copy resources, for the subject matter assigned and how it relates to the underlying subject of each chapter. Sources shall be notated as an addendum. Students shall use "reliable" resources and shall be responsible for their "due diligence" to insure that the information is based on legitimate sources.

Introduction, Prologue & Chap. 1 – Birth of the Sound

The Sounds geological beginnings.

Assignment 1 – Searching "on-line" prepare a map and a short report as to the overall area and states that contribute to Long Island Sound. Using sources, in addition to your text, included in your report you should have totals of population estimates, acreage, economic benefits, estimates for types of land use and potential pollutants, that are associated with the Sound.

Chap. 2 - Early Residents

Assignment 2 – Expanding on, and adding to, the information from chapter 2, prepare a short report with a minimum of three valid resources, on the native peoples of the northern shore areas of long Island Sound. The report should include material on how their husbandry practices, with respect to the land and other resources along the coast, how they affected their environment.

Chap. 3 - Adrien Block and the First Explorers

Assignment 3 – Explore the initial impacts and effects of early contacts between the Native Peoples and Europeans, and how that interaction changed, if it did or did not, the environment of the Sound and its coast lines.

Chap. 4 - The American Mediterranean

Assignment 4 – Explore how the colonial era through the early 1800's changed the relationship between the European "settlers" and the Native Peoples, and how the resources of the Sound were utilized.

Chap. 5 - The Industrial Age

Assignment 5 – Explore the "industrialization" of areas adjacent to, or parts of the Sound, with respect to land use and social interactions.

Chap. 6 – Oystering

Assignment 6 – Discuss ramifications of the oystering industry within Long Island Sound with regards to the economic benefits, the Long Island Sound Environment and the social and historical implications.

Chap. 7 - Sprawling Suburbs

Assignment 7 – Describe and outline how the growth of suburbs have impacted the environment of the Long Island Sound.

Chap. 8 – Strangling the Sound

Assignment 8 – Outline, and describe, with additional information, how the "over enrichment" of the Sound with nitrogen was leading the Sound to an ecological disaster.

Chap. 9 – The Brink of Disaster

Assignment 9 – Discuss the looming disastrous impacts on the Sound, along with the economic, social and environmental consequences.

Chap. 10 – Sewage

Assignment 10 – Discuss the historical ways of how sewage and waste was disposed of, how it impacted the sound, and impacted lives of those who worked on the Sound directly or had livelihoods that were directly impacted by industrial and human waste.

Chap. 11 - The Clean Up

Assignment 11 – Discuss the process of the "clean up" of the Sound, the agencies involved, and the complexities of the responsibilities and costs as they relate to both the regulatory entities, the Town and Cities and advocacy groups that played a role in the process.

Chap. 12 - The New Sound

Assignment 12 – Discuss the results of the "clean up", lessons learned and potential for the future of Long Island Sound

The "Next Chapter" – Going Forward Into The 21st Century

LIS in a warming planet –

LIS impacts by growing populations -

LIS impacted by infrastructure demands -

An exploration of the above issues that are likely to affect LIS, and how to limit impacts and preserve this valuable resource for both mankind and the inhabitants of the Sound itself.

Class assignments will focus on how both upland activities (throughout the overall Long Island Sound drainage basin) and "on water" practices, will intertwine with water quality issues, which will present new challenges to preserve this valuable resource.

Quizzes - Specific dates for quizzes will be announced; noted below is the anticipated material that will be covered in each quiz.

Quiz 1 – Chapters 1 through 4

Quiz 2 - Chapters 5 through 9

Quiz 3 - Chapters 9 through 12

Quiz 4 - The 21st Century

Additional Information Related to the Course

Disabilities – If you have a visible or hidden disability that may require classroom or test taking modifications you are encouraged to contact Student Services for assessment.

Responsibility for Work – It is the student's responsibility to determine what assignments that they may have missed due to missed classes, arriving late to class, or due to lack of attention during class. Assignments that are turned in must be identified with the student's name. The instructor reserves the right to assign a "0" to any unidentified work, and to discard it. Also see the section on **Academic Integrity** below.

Academic Integrity – Unless indicated by specific assignments, by the instructor, or for group projects, all work for assignments shall be that of the individual student. Cheating on quizzes or using the work of others without proper credit (plagiarism) for assignments, or other forms of academic dishonesty, as defined by the Student Handbook, is unacceptable. If, after evaluation of the potential infraction(s), are consistent with the Student Handbook, a grade of "0" for the assignment may be assigned.

Office Hours – Students that are having trouble with the class material, assignments or quizzes, are encouraged to meet with the instructor early in the semester rather than waiting until they are so far behind that it becomes difficult to work on their specific issues or lack of understanding the material.

Final Grade – The student's final grade will be based on the weighted average of the 4 quizzes which will account for 60% of your grade. Note that quizzes that were not taken by the student, unless excused by the instructor, will not be eligible to be dropped. The average grade of weekly assignments will count for 30% of your grade and class participation will make up the remaining 10% (5% related to attendance and 5% related to participation in class discussions).

Home Work (**HW**) – Home work and exercise problems will normally be assigned during the first class of the week and will be due on the first class of the following week. Assignments will normally be graded and returned by the first class of the next week. Assignments will normally be due on the 1st class of the week and will be accepted until the second class with no penalty. Late papers will have 10% per week deducted for late papers up to 3 weeks late (or the last day of class at the end of the semester), after which papers will not be accepted and shall count as a "0".

Quizzes – Students will be allowed one side of one $8\ 1/2\ x\ 11$ sheet of paper for information they deem relevant. It is expected that students shall take all quizzes at the time and date that they are given.

Quizzes will be based on lecture material and all assigned sections of the text, exercise problems, and any assigned homework.

Quizzes will be assigned a value by the instructor; quiz grades will be the number of points earned on the quiz divided by the total value of the quiz.

Missed Quizzes – It is the student's sole responsibility to make arrangements to make up any missed quizzes. Missed quizzes, must be made up through the Testing Center, unless prior arrangement has been made with the instructor. It will remain the student's responsibility to make an appointment with the Testing Center at a time that the Center can accommodate them. Quizzes not made up within 10 days of the original quiz date will be assigned a "0" for the quiz.

As taking a quiz after other students gives one a potential advantage, the quiz may or may not be the same as that taken by students on the original quiz date. The instructor shall be the sole determiner as to the necessity for a separate quiz. The Instructor will make a reasonable effort to make the alternate quiz equal in degree of difficulty, but shall also be the sole determiner as to whether the alternate quiz is comparable. Simply put, if you want to be assured, that you are taking a comparable quiz, that is not more difficult than the original quiz, shown up on the day and time of the original quiz.

Class Attendance is expected, although, while students will not be specifically penalized for non-attendance they will be responsible for material covered in their absence. It will be the student's sole responsibility to determine what assignments that may have been missed and when they are due. Note that substantial absences will however affect the grade portion related to participation.

Class Room Policies - Cell phones brought to class shall be off and out of site (no texting). Language and behavior that is disrespectful, or disruptive, to others is unacceptable; Students should refer to their Student Handbook for examples of such behavior as well additional school policies.

Digication

All students are required to maintain an online learning portfolio in Digication that uses the college template. Through this electronic tool students will have the opportunity to monitor their own growth in college-wide learning. The student will keep his/her learning portfolio and may continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. Student work reviewed for assessment purposes will not include names and all student work will remain private and anonymous for college improvement purposes. Students will have the ability to integrate learning from the classroom, college, and life in general, which will provide additional learning opportunities. If desired, students will have the option to create multiple portfolios.