# Sam Houston State University

Department of Computer Science CSTE 7325: Technology Sustainability Spring 2018

## **General Information**

Instructor:	Dr. Li-Jen Lester
Office:	AB1 216C
Phone:	936.294.1582
Email:	<u>lys001@shsu.edu</u>
Course Title:	Technology Sustainability

# Office Hours

- Dr. Lester will be available online most times. Her virtual office hours will be from 9:00 A.M. to 12:00 P.M. Monday, Wednesday, and Friday during the semester.
- Dr. Lester can be reached via email (<u>lys001@shsu.edu</u>), Google + Hangout (<u>lijenlester@gmail.com</u>), or via Skype (shannon1582).

## **Course Description**

This course examines the potential and the challenges associated with initiating and maintaining green and cost-efficient technology infrastructures based on environmental awareness initiatives. Prerequisites: Graduate standing CSTE 7315. Credit 3.

## **Course Objectives**

At the end of this course the ideal student should be able to:

- Research and evaluate the goals and approaches of effective Green IT initiatives.
- Identify and address the challenges that limit the viability of Green IT initiatives in organizations.
- Analyze existing IT infrastructures to determine if they are meeting the standards of Green IT initiatives.
- Model technologies to support effective communication and collaboration among administrators and users, based on Green IT.

# Textbook

BCS The Chartered Institute for IT, (2012). Green IT: Managing your carbon footprint [ePUB]. British Informatics Society Limited.

Students are expected to fully utilize online resources through the University Library. A list of useful links to academic resources will be provided to support each of the course units. Approaches to identifying and classifying appropriate academic research will be reviewed as part of the Introduction unit.

# Course Units

Unit 1 Introduction of Green IT (Peer Review)

- Welcome and Introductions
- Course Structure and Requirements
- Development of Green IT Background Resource Collections: Sustainability, Communication System, & Client and Server

Unit 2 Identification of Existing IT Infrastructures (Peer Review)

- Green IT Infrastructures Project
- Site Visitation
- Green IT Infrastructure Report

Unit 3 Cloud Fundamental (Module Completion)

• Complete training programs in

- Core cloud concepts, Basic cloud services, Cloud usage models, and Cloud security basics
- o Microsoft Azure as an IaaS and PaaS solution
- Microsoft Office 365 as a SaaS solution

Unit 4 Green IT Initiative - Focus Group (Peer Review)

- Proposal for Green IT Initiative Focus Group Interview
- Focus Group Evaluation
- Unit 5 Green IT Initiative Project
  - Green IT Initiative Project Whitepaper
  - Whitepaper Presentation

# **Grading Criteria**

- Peer Review Discussion: 3 units (Unit 1, 2, & 4) X 50 Points
- Green IT Infrastructure Design: 100 Points
- Cloud Fundamental Training Completion: 250 Points
- Focus Group Evaluation: 50 Points
- Green IT Grant Application: 150 Point

Grading shall be configured as the following:

Peer Review Discussion	150 Points
Green IT Infrastructure Design	100 Points
Cloud Fundamental	250 Points
Focus Group Evaluation	50 Points
Green IT Grant Application	150 Points
Total	700 Points

Course letter grades will be assigned according to the following:

А	630 – above
В	560 - 629
С	490 - 559
F	Below 490

If the required assignment was turned in late after the due date, the student will suffer certain percent of penalty according to the submitted time:

- 10% penalty between 0 24 hours
- 20% penalty between 24 48 hours
- 100% penalty after 48 hours

If the required assignment was submitted late for <u>the fourth times</u>, the student/s will receive <u>no point</u> for the fourth and further late assignments.

#### Tests

This course is a research-based course and does not require tests or final exams.

#### Academic dishonesty

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an

examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

#### Americans with Disabilities Act

Students with disabilities covered by the Americans with disabilities Act should go to the Counseling Center and Services for Students with Disabilities (SSD) in a timely manner to obtain the documentation required. Students are responsible for initiating the process of documenting the need for an accommodation under the ADA act.

## **Religious Observance**

University policy allows for student to observe religious holy days without penalty. If you intend to miss class or project due dates as a result of the observance of a religious holy day or as a result of the necessary traveling time required for religious observance, such an absence will not be penalized. As a courtesy, it would be appreciated if you notify the instructor in advance in writing, of the dates and times of class sessions that are to be missed. Students absent from class as a result of religious observance are required to submit any due assignments immediately on their return to the classroom. Makeup tests and quizzes will also be provided on return to the class.

# Q Drop Date

February 1<sup>st</sup>, 2018 is the last day students can drop a course with a "Q".

## Academic Probation and Suspension (From the Graduate Catalog 2017-2018)

Academic Probation and Suspension

In order to achieve and remain in academic good standing at Sam Houston State University, a graduate student must maintain an overall grade point average of at least 3.0 on all graduate coursework attempted. A 3.0 overall grade point average is the absolute minimum required for graduation. A graduate student who falls below a 3.0 overall grade point average at the close of any semester during which one or more semester credit hours are attempted will be placed on probation. If an enrolled student on probation fails to achieve a minimum 3.0 overall grade point average at the close of the next semester or summer school following the starting of the probation, the student will be suspended.

A committee of the department or college graduate faculty will review the graduate status for any student earning two grades of "C" in any combination of graduate courses. The committee will consider the advisability of the student's continued enrollment in the graduate program. A student who earns three grades of "C" or one grade of "F" will be terminated from graduate studies. A student who earns a third grade of "C" or a grade of "F" during the semester or summer of the anticipated graduation will be terminated from graduate studies. The appropriate academic dean may place on probation, retain on probation, or suspend any student deficient in grade points without regard to the regulations previously stated.