

# Sam Houston State University

Department of Computer Science

CSTE 5338: Development of Technology Infrastructure in School  
Fall 2017

## General Information

Instructor: Dr. Li-Jen Lester  
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Course Title: Development of Technology Infrastructure in School

## Office Hours

- Dr. Lester will be available online most times. Her virtual office hours will be from 8:00 A.M. to 12:00 P.M. Mon. and Wed during the semester.
- Dr. Lester can be reached via email ([lys001@shsu.edu](mailto:lys001@shsu.edu)), Google + Hangout ([lijenshannon@gmail.com](mailto:lijenshannon@gmail.com)), or via Skype (shannon1582).

## Course Description

This course examines the funding, design and implementation processes required to establish and realize a coherent technology acquisition and management strategy. Prerequisites: Graduate standing CSTE 5337. Credit 3.

## Course Objectives

Based on the Individual Development & Educational Assessment (IDEA), at the end of this course the ideal student should be able to present the following essential and important objectives:

- Developing specific skills, competencies, and points of view needed by professionals in the fields of developing technology infrastructure in school
- Learning how to find and use resources for answering questions or solving problems
- Learning to analyze and critically evaluate ideas, arguments, and points of view in implementing the process of Long-Range Technology Plan

Learning Objectives	Performance Assessment	<i>ISTE.NETS.C Advancing Digital Age Coaching</i>
Contribute to the development, communication, and implementation of a shared vision for the comprehensive use of technology to support a digital-age education for all students.	Needs Analysis Data Aggregation	1a
Contribute to the planning, development, communication, implementation, and evaluation of technology-infused strategic plans at the district and school levels	Needs Analysis Training Outlines	1b
Advocate for policies, procedures, programs, and funding strategies to support implementation of the shared vision represented in the school and district technology plans and guidelines.	Training Outlines	1c
Maintain and manage a variety of digital tools and resources for teacher and student use in technology-rich learning	Needs Analysis	3b

environments.		
Troubleshoot basic software, hardware, and connectivity problems common in digital learning environments.	Needs Analysis Training Outlines	3e
Collaborate with teachers and administrators to select and evaluate digital tools and resources that enhance teaching and learning and are compatible with the school technology infrastructure.	Needs Analysis	3f
Use digital communication and collaboration tools to communicate locally and globally with students, parents, peers, and the larger community.	Needs Analysis	3g
Conduct needs assessments to inform the content and delivery of technology-related professional learning programs that result in a positive impact on student learning.	Needs Analysis	4a
Engage in continual learning to deepen content and pedagogical knowledge in technology integration and current and emerging technologies necessary to effectively implement the NETS•S and NETS•T	Training Outlines	6a
Engage in continuous learning to deepen professional knowledge, skills, and dispositions in organizational change and leadership, project management, and adult learning to improve professional practice.	Training Outlines	6b

### **Community Engagement:**

In this course, you will not only learn knowledge and skills, but also actively use them to make a difference to improve the quality of life. This experience, it is hoped, will help you see yourself as a positive force in this world and deepen your understanding of your role as a citizen.

A Community Engagement Project in this course will be working with any school, district, or institution to evaluate and propose an updated technology plan. A reflection document and a record of nine hours should be submitted at the end of the semester.

### **Textbook**

No textbooks are required for this course.

### **Supplementary References**

#### **Technology Plan:**

1. National Education Technology Plan 2017  
<https://tech.ed.gov/netp/>
2. National Educational Technology Standards: NETs for Students  
<http://www.iste.org/standards/standards-for-students>
3. National Educational Technology Standards: NETs for Teachers  
<http://www.iste.org/standards/standards-for-teachers>
4. Texas Education Agency: ePlan  
[http://tea.texas.gov/Academics/Learning\\_Support\\_and\\_Programs/Technology\\_Planning/ePlan/](http://tea.texas.gov/Academics/Learning_Support_and_Programs/Technology_Planning/ePlan/)

5. Long-Range Plan for Technology, 2006-2020  
[http://tea.texas.gov/Academics/Learning\\_Support\\_and\\_Programs/Technology\\_Planning/ePlan/](http://tea.texas.gov/Academics/Learning_Support_and_Programs/Technology_Planning/ePlan/)

6. Enrollment Trends in Texas Public Schools  
[http://www.tea.state.tx.us/acctres/enroll\\_index.html](http://www.tea.state.tx.us/acctres/enroll_index.html)

7. State of Texas Assessments of Academic Readiness (STAAR) Resources  
<http://www.tea.state.tx.us/student.assessment/staar/>

8. Teachers' Tools for the 21<sup>st</sup> Century  
<http://nces.ed.gov/surveys/frss/publications/2000102/>

### **Funding Resources:**

1. Federal Education Budget News  
<http://www2.ed.gov/about/overview/budget/news.html>

2. E-Rate  
<http://tpesc.esc12.net/erate/default.html>

3. Financial Integrity Rating System of Texas (FIRST)  
[http://www.tea.state.tx.us/index4.aspx?id=3864&menu\\_id=645](http://www.tea.state.tx.us/index4.aspx?id=3864&menu_id=645)

4. TEA Grant Resources  
[http://www.tea.state.tx.us/index2.aspx?id=2147487920&menu\\_id=951](http://www.tea.state.tx.us/index2.aspx?id=2147487920&menu_id=951)

5. Technology Grants Resources:  
<http://technologygrantnews.com/grant-index-by-type/educational-technology-grants.html>

### **Technology Management:**

1. 101 Best Web sites for teacher tools and professional development  
[www.iste.org/images/excerpts/101TEA-excerpt.pdf](http://www.iste.org/images/excerpts/101TEA-excerpt.pdf)

2. School Site Design  
[http://www.cisco.com/en/US/docs/solutions/Enterprise/Education/SchoolsSRA\\_DG/SchoolsSRA\\_chap10.html#wp1050709](http://www.cisco.com/en/US/docs/solutions/Enterprise/Education/SchoolsSRA_DG/SchoolsSRA_chap10.html#wp1050709)

3. Access to Technology: Disabilities Access Technology  
<http://www.washington.edu/doit/Brochures/Technology/aeit.html>

### **Grading Criteria**

- Step Discussion – Self Reflection & Peer Reviews: 10 Steps X 10 Points
- Video Consultation Records: 50 Points
- Training Package: 100 Points
- ACE Community Reflection Paper: 30 Points
- Final Reflection Paper: 100 Points

Grading shall be configured as the following:

10 Steps Discussion	100 Points
Video Consultation Records	50 Points

ACE Community Reflection Paper	30 Points
Final Training Package	100 Points
Final Project Reflections	100 Points
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Total	380 Points

Course letter grades will be assigned according to the following:

A	342 – above
B	304 – 341
C	266 – 303
F	Below 266

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 the fourth times, the student/s will receive **no point** for the fourth and further late assignments.

### **Course Schedule (Tentative)**

This course is a 100% online course. There will be no face-to-face meet required for this semester. However, a required online weekly self-evaluation and peer reviews is suggested to post by every **Wednesdays at 11:59 P.M.**

### **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.

### **New Q Drop Date**

November 10, 2017 is the last day students can drop a course with a “Q”.

**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 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 3.0 overall grade point average is the absolute minimum required for graduation. A student who earns three grades of "C" or one grade of "F" will be terminated from graduate studies.

**Students with Disabilities Policy:**

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail [disability@shsu.edu](mailto:disability@shsu.edu)). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see:

<http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf>