



LTMS 510.01

Learning Technologies and Solutions (3 credits)

Spring 2013

Room 1258 and <http://harrisburgu.adobeconnect.com/ltms510-sp13>

INSTRUCTOR AND CONTACT INFORMATION:

Instructor: Andy Petroski

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Office Hours: By Appointment

Corporate Affiliation: Harrisburg University, Director of Learning Technologies and Assistant Professor of Learning Technologies

LinkedIn: <http://www.linkedin.com/pub/0/176/315>

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Twitter: @apetroski

COURSE DESCRIPTION:

Learning Technologies and Solutions: LTMS 510

This course presents an overview of multiple technology-based solutions to realize learning outcomes. Beyond a survey of learning software, the course challenges students to think broadly about emerging technology trends that present opportunities. By establishing a systematic decision analysis process, students will be able to assess suitable technology tools for specific environments and learning needs. A broad survey of open source and proprietary solutions will be explored as well as emerging trends in learning technologies. Course topics are examined within a framework of a learning strategy and a learning architecture.

COURSE DELIVERY METHOD:

This course will be delivered through face-to-face instruction, online synchronous communication and online asynchronous communication.

This course is designed as a multiplayer game. The goal of the game is to traverse the world of learning technologies and gain enough experience points (XP) to survive the game. At the beginning of the course every student in the class will choose and name their avatar. You will play the game as an individual but also participate in some game play as part of a guild. Guild membership will be determined based on final class size. Guilds will choose their names and group in their starting zones at the beginning of most classes. Each guild will be composed of one member who is a sage (*project manager*), architect (*instructional designer*), conjurer (*multimedia producer*), sculptor (*graphic designer*), artisan (*developer*) or gatekeeper (*quality assurance*).

Class time will be divided between exploring new lands (*demos, investigation and site visits*), completing

quests (creating a question, answering a question, adding a bookmark, commenting on a bookmark, playing games and simulations), crafting (blogs, podcasts, ebook chapters, wiki content, mind maps and PechaKucha presentations), guild challenges (case studies and PechaKucha presentations) and dialogue (presentations, lecture and discussions)

COURSE / DEGREE PRE-REQUISITES:

- BA/BS Degree or POI

MINIMUM PRE-REQUISITE SKILLS:

- Basic computer skills
- Basic search engine experience
- Experience completing web forms
- Basic software download and installation experience
- Graduate level writing, presentation, and communication skills

COURSE GOALS AND OBJECTIVES:

Course Goal:

After completing this course students will be able to select appropriate learning technologies to achieve desired learning outcomes and will have a foundation to support successful management, design, and development of learning technology solutions.

Course Objectives:

- List and describe domains of learning related to desired learning outcomes
- Consider goal, audience and technology analysis to aid in selecting appropriate learning technologies
- Consider learning technology selection within a learning technology architecture
- Describe the strengths, weaknesses and considerations of various learning technologies
- Systematically identify, evaluate, and select learning technologies
- Identify and discuss future learning technology solutions and implications

TEXTBOOKS AND OTHER COURSE MATERIALS:

A TEXTBOOK IS NOT REQUIRED FOR THIS COURSE

- Book excerpts as assigned
- Articles as assigned
- Reports as assigned
- Open Educational Resources (OER)

Course page:

Access the course site at <http://moodle.harrisburgu.edu/>

LTMS Laptop Requirement:

- Students enrolled in Harrisburg University of Science and Technology's degree programs are required to have a laptop computer in order to complete specific course requirements.
- If you already have a laptop and want to continue using it at Harrisburg University, please be aware of the minimum required specifications for the LTMS program. Information can be found on the LTMS web site (<http://www.harrisburgu.edu/academics/graduate/learning-technologies/ltms-laptop-req.php>).
- Minimum requirements for connecting to the HU wireless network can also be found on the HU web site (http://www.harrisburgu.edu/campuslife/technology/faq/wireless_network_req.php).

COURSE COMPETENCIES:

1. Critical Thinking

- Select appropriate learning technologies based on desired learning outcomes, audience analysis, and technology analysis
- Systematically evaluate learning technologies
- Consider the similarities and differences among learning technologies and their uses in K-12, higher education and business
- Think about learning technologies beyond standard uses
- Evaluate the wide reaching impact of learning technologies on the instructor, the student, the organization, and society
- Consider future learning technologies, potential uses, and ultimate impact

2. Communication

- Post thoughts about and experiences with learning technologies on a blog
- Respond to instructor and student Moodle posts in writing to expand upon points made or present alternate points-of-view
- Present information about learning technologies
- Create podcasts for learning
- Discuss learning technologies in class and online
- Ask questions of learning technology professionals

3. Teamwork and Collaboration

- Work in groups as directed by the instructor to present information and complete assignments
- Work in a collaborative online environment to contribute to an online learning technologies wiki

4. Entrepreneurship

- Identify gaps in learning technologies solutions and discuss opportunities for filling gaps
- Discuss future technology advancements, their application to learning solutions, and their potential to be marketable products

5. Information Literacy

- Research and evaluate information about learning technologies

- Follow copyright law and fair use guidelines

6. Ethical Decision Making

- Identify and evaluate security and privacy issues related to the use of learning technologies
- Follow intellectual copyright laws when creating instructional materials

7. Global Awareness

- Consider how different cultures react to new ways of learning
- Identify ways in which learning technologies can impact the individual, the organization and the community
- Discuss the holistic impact learning technologies can have on personal success, organizational success, and social and environmental issues

EVALUATION AND ASSESSMENT:

You will start the game as a Level One avatar. Level Sixteen is the highest level you can achieve.

Level	XP*	Letter Grade
Level Sixteen	1695	A
Level Fifteen	1470	A-
Level Fourteen	1245	B+
Level Thirteen	1020	B
Level Twelve	795	B-
Level Eleven	653	C+
Level Ten	546	C
Level Nine	439	C-
Level Eight	332	D
Level Seven	225	
Level Six	189	
Level Five	153	
Level Four	117	
Level Three	81	
Level Two	45	
Level One	0	F

*Your level will be determined by experience points (XP). You gain XP by conducting raids, completing quests, crafting and collaborating with other game players as appropriate within the rules of the game.

Crafting: Blog Post (15 XP for each)

Crafting: Podcast (25 XP for each)

Crafting: Wiki Post (10 XP for each)

Crafting: Mind map (5 XP for each)

Crafting: PechaKucha presentation (15 XP for each)

Crafting: eBook Chapter (20 XP for each)

Pickup Group: 2-Player crafting. YOU MUST LET THE GAME MASTER KNOW YOU PLAN TO PARTICIPATE IN A PICKUP GROUP. Players cannot team with a fellow guild member in a pickup group. Players cannot team with the same player in a pickup group more than twice. Each player in the pickup group will receive 50% of the XP awarded for the item that is crafted. *(For example: if a pickup group crafts a podcast and receives 20 out of the possible 25 XP points for the podcast, each player in the pickup group receives 10 XP points for crafting the podcast in a pickup group.)*

Quest: Site visit (20 XP) *(only available in certain lands)*

Quest: Create a question (5 XP)

Quest: Answer a question (5 XP)

Quest: Add a bookmark (5 XP)

Quest: Comment on a bookmark (5 XP)

Quest: Games & Simulation Play (10 XP for each)

Conquer a Land: Craft every item and complete every quest in a land (50 XP)

Raid Preparation: Guild case study creation (50 XP)

Raid: Guild case study throw down (50 XP for the winning Guild)

Boss Battle: Learning Technologies Full Presentation (100 XP)

Boss Battle: Learning Technologies Selection Report (150 XP)

Power up with participation XP! There are 300 possible XP points for participation. You'll earn participation XP each time you complete a quest, take part in crafting or participate in a guild challenge. The amount of participation XP received will depend on your performance in anyone of those tasks. You can also earn participation XP by the amount and quality of activity when exploring new grids and during dialogue.

Failure to battle the bosses (learning technology selection report or learning technology presentation) will automatically reduce your level standing by three (3) levels for each boss you fail to battle.

Full game play is expected. In addition to the expectation of battling both bosses, each player must craft at least one of every item and complete each of the quests at least once (except the site visit) at some point during game play.

Badges can also be earned through successful gameplay and establishing expertise in a certain topic. Badges don't impact your XP but signify your expertise to the game community. The following badges can be earned in three stages, beginner, intermediate and experienced.

Pivoteer Badge (Management Systems)	Plyer Badge (Media)	Strider Badge (Online Learning and OER)	Combinator Badge (Social Learning and Web 2.0)	Assembler (Virtual Classroom)	Funerator (Games, Simulations & Gamification)
Reconnoiter (Virtual Worlds)	Conductor (Classroom Technology)	Auditor (Assessment Technology)	Traveler (Mobile Learning)	Amplifier (Augmented Reality)	Benefactor (Assistive Technology)
Substitutor (Alternative	Fortune Teller				

Devices)	(Future)				
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PERFORMANCE CRITERIA:

Your work will be evaluated according to the following general guidelines:

Excellent: Exceptional effort. Individual was always prepared to discuss, present, and provide feedback. Work reflects consistent participation and engagement in a manner that reflects a deep interest in and understanding of the course content. Regular contributions are consistently thoughtful, constructive, and beneficial to all involved in the course. Assignments and projects are thoroughly and thoughtfully completed, always indicating additional work, insight, and integration of ideas. Assignments and projects are completed on time, according to requirements, and with a thorough understanding of how individual pieces of the course build upon and integrate with each other.

Above Average: Good effort. Individual was often prepared to discuss, present, and provide feedback. Work reflects consistent participation and engagement in a manner that reflects an advanced interest in and understanding of the course content. The majority of contributions are consistently thoughtful, constructive, and beneficial to all involved in the course. Assignments and projects are thoroughly and thoughtfully completed, often showing some additional work, insight, or integration of ideas. Assignments and projects are completed on time, according to requirements, and with an understanding of how individual pieces of the course build upon and integrate with each other.

Average: Basic Effort. Individual was sometimes prepared to discuss, present, and provide feedback. Work reflects consistent participation and engagement in a manner that reflects some interest in and understanding of the course content. Some contributions are thoughtful, constructive, and beneficial to all involved in the course. Assignments and projects are completed, occasionally showing some additional work, insight, or integration of ideas. Assignments and projects are completed on time, according to requirements, and with a basic understanding of how individual pieces of the course build upon and integrate with each other.

Below Average: Lack of Effort. Individual was rarely prepared to discuss, present, and provide feedback. Work reflects some participation and engagement, but in a manner that reflects little interest in and understanding of the course content. A few contributions are thoughtful, constructive, and beneficial to all involved in the course. Assignments and projects are completed, but do not show additional work, insight, or integration of ideas. Assignments and projects are completed on time, but lack requirements and indicate little understanding of how individual pieces of the course build upon and integrate with each other.

PLAYER SUPPORT:

Academic and Student Affairs Office
Phone: 717-901-5139
Email: ldimino@harrisburgu.edu

Student Success/Tutoring Center
Phone: 717-901-5139
Email: ldimino@harrisburgu.edu
Web: <http://www.harrisburgu.edu/current-students/success/>

Tech Support
Phone: 717-901-5177

Email: helpdesk@harrisburgu.edu

Web: <http://www.harrisburgu.edu/campuslife/technology/helpdesk.php>

Library

Access to proprietary databases

Phone: 717-901-5188

Email: library@harrisburgu.edu

Web: <http://www.harrisburgu.edu/campuslife/library/>

HONOR CODE:

The HU Student Code of Conduct/Honor Code is found in the Student Handbook at <http://www.harrisburgu.edu/current-students/>. Students are expected to adhere to it at all times.

LANDS & DELIVERABLES

You can acquire XP and level up in any way you want. You can conquer a land by completing all of the quests and crafting all of the items in a land. You cannot craft more than one of each item or more than one of any quest for a given land. *(For example, you cannot craft two podcasts for the Virtual Classroom land.)*

- Conquering five (5) lands along with high power up for participation and successful Boss Battles should advance you to a Level Sixteen (16) avatar.
- Conquering four (4) lands along with high power up for participation and successful Boss Battles should advance you to a Level Fifteen (15) avatar.
- Conquering three (3) lands along with high power up for participation and successful Boss Battles should advance you to a Level Fourteen (14) avatar.
- Conquering two (2) lands along with high power up for participation and successful Boss Battles should advance you to a Level Thirteen (13) avatar.
- Conquering one (1) land along with high power up for participation and successful Boss Battles should advance you to a Level Twelve (12) avatar.

Lands

Management Systems | Media | Copyright | Multimedia | Online Tutorials | Online Courses | Open Educational Resources | Software Demos | Social Learning | Collaborative Online Software | Virtual Classroom | Virtual Computer Labs | Games | Simulations | Gamification | Virtual Worlds | Classroom Technology | BYOT | Assessment Technology | Mobile Learning | Augmented Reality | Assistive Technology | Alternative Devices | Future

GAMEPLAY SCHEDULE (subject to change to meet scheduling and player needs)

The general structure of each gameplay session will include:

Demos/Exploration (20 minutes)

Quests (20 minutes)

Guild Challenges (20 minutes)

Crafting (20 minutes)

Quest, Crafting or Boss Battle Presentation / Discussion (30 minutes)

Land or Zone Discussion (20 minutes)

Discourse Directed by the Game Master (30 minutes)

The game play structure and schedule will remain flexible throughout the game.

Zones

Each guild will be randomly assigned a zone for each game play session. The assigned zone will determine the perspective through which a guild might battle in a guild challenge or participate in demos/exploration, topic discussion or discourse directed by the game master. The zones in play during any game play session may include:

- River of Motivation
- Woods of Recognition
- Catacombs of Comprehension
- The Application Mines
- Palace of Analysis
- Mount Creation

Class 1:

- Introductions
- About the course
- Game play
- Game resources
- Crafting and quests
- Pickup group
- Guild challenges
- Boss Battles
- Power up
- Badges
- Equipment, resources and other preparation
- **Topic 1:** Learning Strategy and Domains of Learning
- **Topic 2:** Analysis

Reading:

- Read *eLearning Tools & Technologies*, Chpt.19 (pgs.405-432)

Activities:

- Player survey
- Select Learning Technology Presentation Topic (*Boss Battle*)
- Create an avatar
- Upload a photo and avatar

Class 2:

- Review
- **Topic 1:** Learning Technology Architecture
- **Topic 2:** Flowcharting
- **Topic 3:** Storyboarding

Class 3:

- Learning Technology Selection Report (Boss Battle)

Assignments:

- Learning Technology Selection Report: Phase 1 (Boss Battle)

Class 4: (Online Session)

Class 5:

- Student Presentation (Boss Battle)
- Student Presentation (Boss Battle)
- **Topic 1:** Strategies and criteria for selecting tools
- **Topic 2:** Use cases
- **Topic 3:** Decision Analysis

Reading:

- Read How to Buy E-Learning Systems, Tools, and Services report; Writing a Use Case for Evaluation Purposes (pgs. 33-34)

Class 6:

- Student Presentation (Boss Battle)
- Student Presentation (Boss Battle)
- **Topic 1:** Use cases
- **Topic 2:** Decision Analysis

Class 7:

- Student Presentation (Boss Battle)
- Student Presentation (Boss Battle)
- Learning Technology Selection Report (Boss Battle)

Assignments:

- Learning Technology Selection Report: Phase 2, Part 1 (Boss Battle)
- Mid-game Adjustment Evaluation

SPRING BREAK

Class 8: (Online Session)

- Student Presentation (Boss Battle)
- Student Presentation (Boss Battle)
- **Topic 1:** Decision Analysis (cont.)

Assignments:

- Learning Technology Selection Report: Phase 2, Part 2 (Boss Battle)

Class 9:

- Student Presentation (Boss Battle)
- Student Presentation (Boss Battle)

Assignments:

- Learning Technology Selection Report: Phase 2, Part 3 (Boss Battle)

Class 10:

- Student Presentation (Boss Battle)
- Student Presentation (Boss Battle)

Class 11: (Online Session)

- Student Presentation (Boss Battle)
- Student Presentation (Boss Battle)

Assignments:

- Learning Technology Selection Report: Phase 2, Part 4 (Boss Battle)

Class 12:

- Student Presentation (Boss Battle)
- Student Presentation (Boss Battle)

Assignments:

- Learning Technology Selection Report: Phase 3 (Boss Battle)

Class 13:

- Student Presentation (Boss Battle)
- Student Presentation (Boss Battle)

Class 14:

- Student Presentation (Boss Battle)
- Student Presentation (Boss Battle)
- Learning Technology Selection Report Discussion (Boss Battle)

Class 15:

- Final evaluations
- Debrief of game play