

TCH 505 Instructional Technology for Today's Educator

Summer IV 2010 (Monday, June 14 – Friday, July 09)

(3 Credit Hours)

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Class Meeting: Monday - Friday 8:00 – 9:50 am, SPH 240

Office Hours: Monday, Wednesday, & Friday 10:00 – 11:00 am

Theme of the Course: Learning by Searching

Required Reading

All readings are online. Please follow the link to website

<http://webspace.ship.edu/hliu/505/505home.html>

I. Catalog Description

Students develop skills in using current technologies to support instruction in a variety of settings. Multimedia software, web page development, and distance learning design and implementation are required. Students examine various aspects of interactive and noninteractive technologies and make instructional applications. Evaluating appropriate hardware and software configurations for delivering instruction is included. Students will use technology to research and develop real life classroom curricular solutions.

II. SU Conceptual Framework Standards

For those Preparing to Teach, Counsel and Lead in Public Schools

“Collaborative decision-makers: Assessing, Planning, Reflecting”

Our unit of certification programs is a body of collaborative decision-makers who perform within a conceptual framework of assessing, planning and reflecting. Our faculty and candidates are committed to the following standards developed collaboratively by the members of our unit.

1. Promote supportive educational environments that are respectful of and responsive to individual differences.
 - 1.1. Demonstrate understanding of the differences in how students learn and know how to accommodate diversity. Diversity includes, but is not limited to, differences among groups of people and individuals based on ethnicity, race, socioeconomic status, gender, exceptionalities, language, religion, sexual orientation, and geographical area.
 - 1.2. Accommodate diverse learning needs through informed decision-making that supports academic success for all students. Diversity includes, but is not limited to, differences among groups of people and individuals based on ethnicity, race, socioeconomic status, gender, exceptionalities, language, religion, sexual orientation, and geographical area.
 - 1.3. Show respect for the diverse needs and talents of all learners and demonstrate commitment to helping them develop self-efficacy and achieve academic success. Diversity includes, but is not limited to, differences among groups of people and individuals based on ethnicity, race, socioeconomic status, gender, exceptionalities, language, religion, sexual orientation, and geographical area.
2. Reflect continuously upon one's own performance and demonstrate progress in the development of the knowledge, skills and dispositions required for effective professional performance.
 - 2.1. Affirm the University's educational and ethical responsibility to produce highly qualified education professionals.
 - 2.2. Demonstrate academic integrity and uphold the trust of those with whom one works.
 - 2.3. Respond productively and respectfully to the responsibility of meeting professional standards, including state and national standards.
 - 2.4. Demonstrate commitment to ethical practices as described in relevant institutional and professional codes of conduct.
 - 2.5. Demonstrate professional and ethical responsibility through active engagement in the development of the knowledge, skills, and dispositions required to be an effective educator.
 - 2.6. Demonstrate initiative in fulfilling program requirements and in seeking advice and feedback that support achievement of professional goals.
 - 2.7. Respond positively to learning experiences and constructive feedback intended to improve professional knowledge, skills and dispositions.
 - 2.8. Demonstrate qualities that characterize professional conduct in both university and clinical settings.
3. Demonstrate the use of best practices and technologies in order to positively impact the achievement of all learners.
4. Demonstrate the use of appropriate authentic assessments and analytical data to make informed decisions that impact learner achievement.
5. Collaborate with critical others in making informed decisions within educational contexts.

III. INTASC Standards (Interstate New Teachers Assessment and Support Consortium)

INTASC 1: Making content meaningful

The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of subject matter meaningful for students.

INTASC 2: Child development and learning theory

The teacher understands how children learn and develop and can provide learning opportunities that support their intellectual, social, and personal development.

INTASC 3: Learning styles/diversity

The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

INTASC 4: Instructional strategies/problem solving

The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.

INTASC 5: Motivation and behavior

The teacher uses an understanding individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagements in learning, and self-motivation.

INTASC 6: Communication/knowledge

The teacher uses knowledge of effective verbal, nonverbal and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

INTASC 7: Planning for instruction

The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

INTASC 8: Assessment

The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.

INTASC 9: Professional growth/reflection

The teacher is a reflective practitioner who continually evaluates the effects of his or her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

INTASC 10: Interpersonal relationships

The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well being.

IV. Course Objectives

With the impact of information technology and globalization on every aspect of our life, especially on PreK-12 education, this course will promote the awareness and enhance the understanding of the role of information technology in PreK-12 classrooms, and help teacher candidates develop the knowledge, skills, and dispositions necessary to apply computer technology effectively into their specific instruction and learning environments. The course content and activities are aligned with the Institutional Standards, the ISTE National Educational Technology Standards for Teachers (NETS.T 2008) and for Students (NETS.S 2007), Pennsylvania Academic Standards for Science and Technology (focusing on information technology sections), and the INTASC (Interstate New Teachers Assessment and Support Consortium) principles. Upon successful completion of this course, students will be able to

Understand the role of computer technology in education

- ❑ Demonstrate full awareness of the important role of computer technology in social change in general and in education reform in particular
- ❑ Realize that to be qualified teachers in the digital age requires integrating cutting-edge information technologies to enhance instruction and life-long professional development.
- ❑ Recognize the past and current factors/issues that shape the current and the future role of technology in education

Understand the paradigm change in teaching and learning

- ❑ Recognize the changes of cognitive patterns of the younger generation in the digital age under a broad societal background
- ❑ Understand the imperative role change of teachers from knowledge experts to learners' facilitators and co-learners in helping student learning
- ❑ Obtain the knowledge of skills dealing with technology, pedagogy, and content knowledge (TPCK) in classroom instruction

Learn the subject matter of computer technology

- ❑ Understand the basic concepts and terms of computer technology as required by the National Education Technology Standards for teachers and the Pennsylvania Academic Standards for Science and Technology
- ❑ Model digital age teaching and learning
- ❑ Demonstrate digital citizenship and responsibility in the classroom and outside school campus

Develop lesson plans with computer technology integration

- ❑ Create lesson plans with instructional skills and class activities embedded with technology use that motivate learners and promote cooperative learning
- ❑ Develop technologically enhanced instructional activities that successfully meet student's special needs
- ❑ Create student-centered and open-ended learning environments that foster independent inquiry, and problem solving abilities

- Apply technology to integrate traditional and alternative assessment tools to assess and to evaluate student performance

Gain learning skills for life-long professional development

- Use computer technology as a powerful tool for life-long learning as a professional
- Identify and locate learning resources and evaluate them for accuracy, suitability, and influence on future educational practices
- Build individualized databases of online resources and offline resources

Conduct research on technology integration in the classroom

- Research on the effectiveness of integrating technology in instruction
- Research on the learning styles of the digital natives and how to meet student special needs with technology
- Research on responsive solutions to problems caused by using technology in the classroom

V. Class Requirements:

- **Computer Technology Competency.** This course is designed as a web-enhanced course delivered from both classroom and online. Students enrolled in this course should have the proficient knowledge and skills of computer technology.
- **Email Account.** All students of the class are required to use only Shippensburg University email to communicate with the instructor, submit assignments, or ask questions. Other email addresses will not be accepted by the instructor.
- **D2L.** Students can check grades from D2L.
- **Attendance.** Students are to notify the instructor prior to class via e-mail, voice mail, or by submitting an Absence Notification Form, if he/she is unable to attend the class. Students missing 3 or more classes (excused or unexcused) shall receive a reduced grade (one full level). Late arrivals are strongly discouraged. Excessive and chronic late attendance will be counted as absences (three late attendances equal to one absence from the class). A sign-in sheet will be used to determine attendance and promptness.
- **Assignments Submission.** All the assignments should be submitted as email attachments or upload in the ePortfolio website according to the individual assignment requirement.
- **Late Assignments.** Late Assignments will not be accepted unless the student has discussed the situation with the instructor prior to the due date and an extension is granted. Students are not allowed to make up points granted for in class activities. Students must be in class to receive credit for lab activities.
- **Assigned Readings.** Assigned readings should be completed before the class meeting date stated on the class schedule.
- **Incomplete.** No "Incomplete" grade will be given unless extreme circumstances exist and only with the approval of the Chair of the Department of Teacher Education.
- **Academic Honesty.** Shippensburg University will not tolerate academic dishonesty in the form of plagiarism or cheating under any circumstances.

Offenders will be held accountable for any form of academic misconduct under the terms found within the Shippensburg University policy on academic dishonesty <http://www.ship.edu/catalog/HTML/ugrad07-09/986.htm>

- ❑ **Lab Property and Safety.** Everyone is responsible for the safe use of lab equipments. Lab rules should be strictly observed.
- ❑ **Group Activities.** Everyone is required to play a full role in group activities as defined in the assignment requirements. Absence from group activity will result in no credit for that assignment.

VI. Assignments & Points Distribution:

(Assignment requirements and rubrics are hosted in D2L)

#	Assignments/Labs	Amount	Points	Subtotal	Format
	Pre-Class Survey	1	5	5	Online Survey
1	e-Portfolio Website	1	50	50	Google Website
2	LT&S Mini Lecture	1	20	20	Web Page
3	Blog Submissions	3	5	15	Web Posting
4	Class Discussion	15	1	15	Discussion Participation
5	My Special Project	1	10	10	Project Presentation
6	Research Project (Group)	1	50	50	Paper & PPT
7	Conference Presentation	1	30	30	Presentation
8	Labs	10	10	100	Lab in Class
	Post Class Survey	1	5	5	Online Survey
Total Points				300	

Labs

01	Image Editing with Online Tools	06	Google Earth
02	JeopardyLabs	07	Xtranormal
03	PollDaddy	08	Jing Project
04	Google Docs	09	MyPodcast
05	Google Map	10	Survey Monkey

VII. Grade Policy

Letter Grade	300 Scale	100 Scale
A	285-300	95-100
A-	270-284	90-94
B+	261-269	87-89
B	252-260	84-86
B-	240-251	80-83
C+	231-239	77-79
C	219-230	73-76
C-	210-218	70-72
D	180-209	60-69
F	179 and under	59 and under

TCH 505 Class Schedule – Summer IV 2010
(Monday-Friday)

#	Date	Lecture Topics	Readings	Assignments Due Dates
Week #1				
1	06/14 M	<ul style="list-style-type: none"> ▪ Course Introduction ▪ D2L Intro ▪ Digital-Textbook Intro ▪ Brainstorming Needs and Issues ▪ Set up website account ▪ Set up e-Portfolio Framework 	Syllabus https://d2l.ship.edu/ Digital Textbook	e-Portfolio Project Starts http://sites.google.com/
2	06/15 T	<ul style="list-style-type: none"> ▪ Lecture – 01 ▪ National Technology Standards ▪ National Education Technology Plan 2010 ▪ <i>LT&S Mini Lecture Demo</i> ▪ Google Website ▪ e-Portfolio Building 	<u>Read:</u> Technology Standards Technology plan 2010	
3	06/16 W	<ul style="list-style-type: none"> ▪ Lecture - 02 ▪ The Millennial Learner ▪ 21st Century Learning ▪ TPCK ▪ Blog Starts ▪ Lab-01 Image Editing with Online Tools 	Watch The Millennial Learner An Open Letter to Educators	#1 Blog Submission Starts
4	06/17 Th	<ul style="list-style-type: none"> ▪ Lecture - 03 ▪ Searchology: Searching Overview ▪ <i>LT&S Mini Lecture-01</i> ▪ Lab-02 JeopardyLabs 	Watch Search Strategies	<i>LT&S Mini Lecture starts</i>
5	06/18 F	<ul style="list-style-type: none"> ▪ Lecture - 04 ▪ Search Engines ▪ <i>LT&S Mini Lecture #02</i> ▪ Lab-03 PollDaddy 	Read Choose the Best Search	
Week #2				
6	06/21 M	<ul style="list-style-type: none"> ▪ Lecture - 05 ▪ Basic Searching Skills ▪ <i>LT&S Mini Lecture #03</i> ▪ Lab-04 Google Docs 	Read Different Strategies Google Search Tips	#1 Blog Submission Due
7	06/22 T	<ul style="list-style-type: none"> ▪ Lecture - 06 ▪ Web Browsers & Searching Efficiency ▪ <i>LT&S Mini Lecture #04</i> ▪ Lab-05 Google Map 	Read Compare Major Browsers	
8	06/23 W	<ul style="list-style-type: none"> ▪ Lecture - 07 ▪ Search Strategy-Subscribe to Newsletters ▪ Blog #02 ▪ Research Project Starts ▪ Lab-06 Google Earth 	Read Subscribe to ASCD SmartBrief	#2 Blog Submission Starts Research Project Starts (Research Topic Selected)

9	06/24 Th	<ul style="list-style-type: none"> ▪ Lecture - 08 ▪ Searching Strategy-Subscribe to Search Alerts ▪ <i>LT&S Mini Lecture #05</i> ▪ Lab-07 Xtranormal 	Read Google Alerts	
10	06/25 F	<ul style="list-style-type: none"> ▪ Lecture - 09 ▪ Searching Strategy – Subscribe to RSS Feed ▪ <i>LT&S Mini Lecture #06</i> ▪ Lab-08 JingProject 	Watch What is RSS Feed How Subscribe to RSS Feed	
Week #3				
11	06/28 M	<ul style="list-style-type: none"> ▪ Workshop ▪ Digital Library Searching Strategy Given by Librarian 	Read Ship Library	#2 Blog Submission Due
12	06/29 T	<ul style="list-style-type: none"> ▪ Lecture – 10 ▪ Searching Strategy- Target on Specific Databases ▪ <i>LT&S Mini Lecture #07</i> ▪ Lab-09 MyPodcast 	Read PPT	
13	06/30 W	<ul style="list-style-type: none"> ▪ Lecture – 11 ▪ Web Source Evaluation ▪ Blog #02 ▪ <i>LT&S Mini Lecture #08</i> ▪ Lab-10 Survey Monkey 	Read PPT	#3 Blog Submission Starts
14	07/01 Th	<ul style="list-style-type: none"> ▪ Lecture –12 ▪ Knowledge Infrastructure, Information Processing, and Learning Documentation ▪ <i>LT&S Mini Lecture #09</i> ▪ Lab-11 Windows Movie Maker 	Read PPT	
15	07/02 F	<ul style="list-style-type: none"> ▪ Continue with unfinished labs, blog, and other projects. No Class Meeting 		
Week #4				
16	07/05 M	<ul style="list-style-type: none"> ▪ Independence Day, School Closed 		
17	07/06 T	<ul style="list-style-type: none"> ▪ Lecture-13 ▪ Data Visualization Technology ▪ Learning by Creating ▪ <i>LT&S Mini Lecture #10</i> ▪ Labs Clean Up 	Read Sample Graphs Google Chart Tools	#3 Blog Submission Due
18	07/07 W	<ul style="list-style-type: none"> ▪ Guest Speaker on Technology integration in K-12 classrooms 		
19	07/08 Th	<ul style="list-style-type: none"> ▪ Lecture-14 ▪ Trends and Issues in Technology Integration in the classrooms ▪ Work Day for Assignments and Projects 	Read PPT	e-Portfolio Website Due Research Paper Due
20	07/09 F	<ul style="list-style-type: none"> ▪ e-Portfolio Presentation ▪ My Special Project Presentation ▪ Research Project Presentation (PPT) 		Class Conference