Bilkent University
Graduate School of Education
TE 520 Instructional Technology and Material Development
Syllabus, Spring 2010

Credits: 3

ECTS Credits: 8

Name of Lecturer: Instructor Serpil Tuti Sarı

E-mail address and web page: serpilt@bilkent.edu.tr, www.bilkent.edu.tr/~serpilt

Ext.:

Office:

Office Hours:

*Lecture hours, Date, and Place:

I. Catalog Entry of the Course:

The course includes concepts of instructional technology, characteristics of various types of instructional technology. The course considers the role and use of instructional technology in teaching, the identification of technology needs in the classroom/school, and the appropriate planning and management of the use of technology. Using technology to develop 2-D and 3-D materials, developing teaching tools (worksheets, activities, OHP transparencies, slides, visual media tools such as DVD, VCD and computer -based tools), analyzing educational software, evaluating teaching tools of varying quality, internet and distance education, principles of visual design, research pertaining to the effectiveness of teaching materials, and the state of instructional technology for teaching in Turkey and the wider world.

II. Course Description

This course will give students the opportunity to become familiar and operational with common educational software, internet applications, and ICT tools used in education. This will be accomplished by hands-on experience creating discipline-based educational activities by using Information and Communications Technology (ICT) with a particular focus on improving students' learning. Students will actively participate in classroom demonstrations, develop lesson plans, and teaching/learning materials based-on

Instructional Technology.

III. Course objectives

The course has three main goals: to connect curriculum and technology (ISTE, 2010), second one is to learn how to teach with technology, and third one is to develop and design new materials for subject areas by using of instructional technology. By considering these three main goals, at the end of the course students will be able to:

- Use instructional technology applications to improve students learning *(Domain P.)*.
- Use instructional technology to support problem solving, data collection, information management, communications, and decision-making *(Domain P.)*.
- Develop lesson plans (goals, content, teaching and learning strategies, developing useful instructional resources, and assessment) and instructional materials using software applications and tools *(Domain P.)*.
- Lead classroom investigations and demonstrations using technology tools and applications *(Domain P.)*.
- Explore, evaluate, select, and use computer/technology resources including applications, tools, educational software, and associated documentation for applying relevant education criteria *(Domain P.)*.
- Develop and apply an evaluation process to judge the outcomes of using ICT in their own teaching *(Domain P.)*.
- Determine how using ICT in the classroom changes the role of the teacher and student, as well as dealing with the implications for classroom management *(Domain P.)*.
- Demonstrate that they can apply techniques needed to formulate of a technology plan for their own department *(Domain P.)*.
- Have produced a list of ICT resources, such as software and websites, which are relevant to high school teaching *(Domain P.)*.

IV.   Overview of Activities and Weekly Schedule

The weekly teaching and learning pattern will be:

Weeks	Topics

Week 1	Introduction and overview of course.
	Lecturer's expectations and approach to learning and assignments.
	Policies on attendance, lateness and submission of assessments.
	*Computer competency test
	
	-- 	
	Connecting Curriculum and Technology (ISTE)
	   ▪ Essential Conditions to make it happen
	   ▪ What curriculum integration?
	   ▪ Introduction to learning and technology: timeline of educational technology
	   ▪ Computers and computer tools for teaching and learning

Week 2	Planning the technology-enhanced learning experience (Newby, T.J., et al., 2006)
	   ▪ Educational Technology Standards for teachers, students, and administrations (ISTE)
	   ▪ 21st Century Learner profile: Digital natives and digital immigrants
	Technology and Learning Today and Tomorrow (Newby, T.J., et al., 2006)"
	   ▪ Issues in Integrating Technology
	   ▪ Trends in Educational Technology

Week 3	Curriculum integration (ISTE)
	   ▪ Linking learning activities to content and technology standards
	   ▪ Multidisciplinary Resources Unit Development (Activity templates, lesson plan templates, etc.)
	Meaningful Integration of Technology(Newby, T.J., et al., 2006)

Week 4	Instructional Strategies: Integrating Technology and Media (Smaldino, E. S., et al., 2008, Ch.2). Visual Principles: Designing Effective Materials (Smaldino, E. S., et al., 2008, Ch.3).
Week 5	Using ICT in your particular subject (Leask and Pachler, 2005) ICT and Classroom Management ICT Tools and Applications Using ICT for Professional Purposes

Week 6	Internet-based project work in teaching (Dudeney & Hockly, 2007)
	   ▪ Why do internet-based project work?
	   ▪ Basic projects
	   ▪ Internet-based simulations
	   ▪ WebQuest creation
	   ▪ A link to internet from PowerPoint

Week 7	Blog, Wikis and Podcasts (Dudeney & Hockly, 2007)
	   ▪ Social software
	   ▪ Blogs in language teaching. How to start using Blogs with learners?
	   ▪ Wikis in language teaching. How to start using Wikis with learners?
	   ▪ Podcasts in teaching. How to create leaner Podcasts?

Week 8	**Midterm Examination, and** **First submission of E-portfolio** 4
Week 9	Online reference tools and Technology-Based Courseware (Dudeney & Hockly, 2007, ch.8-9) ■ Dictionaries and thesauruses ■ Encyclopedias for research and project work ■ CD-ROMs and DVDs ■ Evaluating CD-ROMs ■ Computer-Based Testing ■ Electronic portfolios ■ Interactive Whiteboards
Week 10	Ensuring Successful Technology-Enhanced Learning Experiences (Newby, T.J., et al., 2006) ■ Evaluation of Students and Materials ■ E-portfolio
Week 11	E-learning: online teaching and training (Dudeney & Hockly, 2007, ch. 11) ■ What is E-learning? ■ Teaching and learning online ■ Course design for online learning: Examples ■ Course design for online learning: considerations ■ How to get started with online learning ■ Teacher training and online learning ■ Discussion lists and online groups
Week 12	Preparing for the future (Dudeney & Hockly, 2007, ch. 12) ■ The state of the art ■ How to keep up-to-date ■ Web 2.0 ■ The future of online learning ■ Virtual learning ■ M-Learning
Week 13	Web resources (*Group Presentation*) Group presentations and demonstrations ■ Blog and RSS ■ Podcasts ■ Wikis, pages, and site ■ Digital storytelling ■ Intelligent agents ■ Course management systems: MOODLE ■ Interactive White Boards ■ Blackboards 9.1 ■ M-Learning ■ E-Learning ■ Virtual Learning *** Course takers are recommended to integrate these technological tools into other GSE courses (Method, TP…) or a microteaching activity.**

Week 14	Summary of class themes and outcomes. Evaluation of course Second submission of Portfolio.
Week 15	Final Examination

V.   IB Teacher Award Learning Outcomes

<u>The following components of TE520 are related to the IB Award Level1:</u>

Domain P. *The use of ICT to support the building of communities of practice*

- Prepare lesson plans incorporating technology in their lesson design
- Discuss how technology is essential in connecting schools and promoting   the learning goals of the IB/PYP programs

VI.   Assessment

Type of assessment	%
Final exam – covering the whole course	**30**
<u>**Course Work**</u> **Individual E-Portfolio and Assignments 20%** You must submit your E-Portfolio <u>twice</u> during the semester. 10 marks will be allocated for each submission. Your E-portfolio will contain all activities, lesson plans, and presentations. **Group presentations 20%** Working in your subject area groups will develop, demonstrate and present a selected lesson plan using an ICT application, such as blogs, wikis, digital storytelling, podcasts… The lesson must be developed and presented by all members of the group. The presentation will be a full lesson. It must focus on that part where you have integrated the ICT application into the teaching and learning process. The lesson should not last more than 40 minutes.	**40**
Midterm Examination	**20**
Attendance	**10**

| 1. **Attendance and punctuality**

Each absence without a medical report   -3%

(Reminder that more than the equivalent of
3 weeks absence (even with medical reports)= Fail)

Each time "**Late**" -1/2

*('**Late**' means after the lesson has started)*

2. **Participation and attitude in class.** | |

VII. Requirement

USB more than 1Gigabyte, reading text for each lesson, headphone, microphone

VIII. Resources

Ally, M. (2009). *Mobile learning: Transforming the delivery of education and training.* Au Pr.

Andrew-Power, K. and Gormley, C. (2009). *DISPLAY for Learning.* Network Continuum: New York

Borich, G. D. (2007). *Effective Teaching Methods: Research-Based Practice.* Pearson Education.

Burns, M. and Dimock, K. V. (2007). *Technology as a catalyst for school communities: Beyond Boxes and Bandwidth.* USA. Rowman & Littlefield Education.

Dudeney, G. and Hockly, N. (2007). *How to Teach English with Technology.* Pearson Education.

Ewy, C. A. (2003). *Teaching with Visual Frameworks: Focused Learning and Achievement Through Instructional Graphics Co-Created by Students and Teachers.* CORWIN PRESS, INC: California

ISTE. (2000). National Educational Technology Standards for Students: Connecting Curriculum and Technology. Cooperation with the U.S. Department of Education.

Ivers, K. S. and Barron, A. E. (2006). *Multimedia Projects in Education: Designing, Producing, and Assessing.* LIBRARIES UNLIMITED: Wesport, Connecticut, London.

Green, T.D., Brown, A., Robinson, L. (2008). *Making the most of the web in your classroom.* CA: Corwin Press.

Lamb, A. (1997). *The Magic Carpet Ride: Integration Technology into the K-12 Classroom.* USA

Leask, M. and Pachler, N. (2005). *Learning to Teach Using ICT in the Secondary School: A Companion to School Experience:* Routledge

Loveless, A. and Ellis, V. (2001). *ICT, Pedagogy and the Curriculum: Subject to Change.* London and New York. Routledge Falmer

Nelson, K.J. (2008). *Teaching in the digital age*, CA: Corwin Press.

Newby, T.J., et al. (2006). Educational Technology for Teaching and Learning: Pearson Prentice Hall.

Pitler, H., Hubbell, E.R., Kuhn, M., Malenoski, K. (2007). *Using Technology with Classroom Instruction that works:* ASCD, MREL

Revell, J. and Norman, S. (1999). Handing Over: NLP-Based activities for language learning. Saffire Press. England

Roblyer, M.D. (2006). *Integrating Educational Technology into Teaching:* Pearson Prentice Hall.

Smaldino, E. S., Lowther, D. L., Russell, J. D. (2008). *Instructional Technology and Media for Learning.* Pearson Education.

Wegerif, R. and Dawes, L. (2004). *Thinking and Learning with ICT: Raising achievement in primary classrooms.* USA and Canada. Routledge Falmer.

Moodle will be used as a learning management system for this course.

*Supplementary reading for the course will be posted on the course website, available elsewhere online or in the library.