

Bilkent University
Graduate School of Education
TE 536 Special Teaching Methods in Computing
Fall 2010 Syllabus

Credits : 3

ECTS Credits : 4

Name of Lecturer : Instructor Serpil Tuti Sari

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Office Hours: Tuesday 15:00 - 16:00

*Lecture hours, Date, and Place: 8:40-12:30, Wednesday, GB55

I. Course Description and Overview:

This course focuses on teaching and learning methods in computer and instructional technology (ICT) in education; integrating and implementing general teaching methods and multi disciplinary studies with ICT; examining, evaluating, and developing thinking skills about different books and lessons which are related with ICT, and integration with special teaching methods and strategies.

II. Course Objectives:

At the end of the course students should be able to:

Primary Objectives;

- ✓ Explain, implement, and critically evaluate teaching and learning methods in

Computer and Instructional Technology in Education.

- ✓ Integrate special teaching and learning methods into real school life.

Secondary Objectives;

- ✓ Develop teaching and learning skills
- ✓ Develop presentation skills
- ✓ Develop thinking skills
- ✓ Plan and evaluate teaching
- ✓ Gain conceptual knowledge
- ✓ Gain knowledge of teaching approaches, methods, techniques and principles
- ✓ Use the results of assessment to evaluate students progress and achievement

III. Overview of Activities and Weekly Schedule

The weekly teaching and learning pattern will be:

One hour discussion of daily topic of using ICT in the curriculum and planning

Three hour lab session – under the guidance of the Lecturer students will evaluate and use selected ICT resources, then integrate it within a teaching and learning process as part of a lesson plan format, provide a rationale for its use, as well as developing other instructional learning resources and projects as appropriate.

Week and Date	Topics, Readings, and Activities
Week 1 22 September	<p>Introduction and overview of course</p> <ul style="list-style-type: none"> ✓ Instructor’s expectations and approach to learning. ✓ Assignments. ✓ Policies on attendance, lateness and submission of assessments. <p><u>Overview and discussing of:</u></p> <ul style="list-style-type: none"> ✓ Characteristics of excellent ICT teachers / lessons ✓ Good quality teaching and learning with ICT ✓ 21st Century learning and teaching Tools ✓ Curriculum, constructivism and integration of ICT <p>Group work: Good to Great ICT Teachers</p>

<p>Week 2 29 September</p>	<p>Overview of different components of teaching: Lesson planning</p> <ul style="list-style-type: none"> ✓ Educational issue ✓ Developing lesson objectives linked to syllabus ✓ Choosing relevant content ✓ Selecting useful teaching and learning strategies ✓ Selection and use of learning resources ✓ Assessment of student learning outcomes linked to lesson objectives ✓ Evaluating lessons in relation to the syllabus goals <p>Assignment 1: Skill Builder activities by using PowerPoint and developing lesson plan for K-12 students</p>
<p>Week 3 6 October</p>	<p>Objectives & Content</p> <ul style="list-style-type: none"> ✓ Practice in development lesson objectives ✓ Process and criteria for content selection–locating, evaluating, and modifying content related to lesson objectives and students profiles. ✓ Role of ICT <p>Assignment2: Skill Builder activities by using Spreadsheet and developing lesson plan for K-12 students</p>
<p>Week 4 13 October</p>	<p>Teaching & Learning Strategies</p> <ul style="list-style-type: none"> ✓ Practice in content selection continued: Key teaching and learning strategies, and the role of ICT. Where appropriate demonstration of how ICT can be used to enhance and extend the following strategies: <ul style="list-style-type: none"> ❖ Explaining ❖ Discussing <p>Assignment3: Developing lesson plan and activities for K-12 students in any topic including ICT by using Explaining and Discussing strategies</p>
<p>Week 5 20 October</p>	<p>Microteaching - 1</p> <ul style="list-style-type: none"> ✓ Microteaching: Explaining and Discussing
<p>Week 6 27 October</p>	<p>Teaching & Learning Strategies</p> <ul style="list-style-type: none"> ✓ Group work ✓ Problem solving – use of ICT ✓ Simulations – use of ICT <p>Assignment4: Developing lesson plan and activities for K-12 students in any topic including ICT by using Group work, Problem solving, or Simulations strategies</p>
<p>Week 7 3 November</p>	<p>Teaching & Learning Strategies</p> <ul style="list-style-type: none"> ✓ Individualized instruction and computer based learning ✓ How to develop student literacy skills – using ICT to locate relevant information, analyses and interpret it, evaluate its usefulness, and communicate results. <p>Assignment5: Multimedia Projects in Education. Create your own project</p>

<p>Week 8 10 November</p>	<p style="text-align: center;">Mid-term</p>
<p>Week 9 24 November</p>	<p>Teaching & Learning Strategies</p> <ul style="list-style-type: none"> ✓ Project based learning – students use their information literacy skills to carry out research ✓ Using a course management system and flexible delivery of learning e.g. Moodle <p>Assignment5 (going on): Multimedia Projects in Education. Create your own project</p>
<p>Week 10 1 December</p>	<p>Resources</p> <ul style="list-style-type: none"> ✓ Selection and use of learning resources ✓ Practice in selection and use of learning resources <p>Assignment6: Present and Demonstrate your Project</p>
<p>Week 11 8 December</p>	<p>Microteaching -2</p> <ul style="list-style-type: none"> ✓ Microteaching: Group work, Problem solving, or Simulations strategies
<p>Week 12 15 December</p>	<p>Assessment +1</p> <ul style="list-style-type: none"> ✓ Assessment of student learning outcomes and role of ICT in different assessment techniques <ul style="list-style-type: none"> ❖ Short answer questions ❖ Multiple-choice questions ❖ Tests and exams' ❖ Projects <p>Assignment7: Start to Create your E-portfolio</p>
<p>Week 13 22 December</p>	<p>Assessment +2</p> <ul style="list-style-type: none"> ✓ Assessment continued: <ul style="list-style-type: none"> ❖ Portfolios ❖ Rubrics ❖ Problem Solving ❖ Assessments of skills <p>Developing assessment of student learning outcomes and role of ICT in different assessment techniques</p> <p>Assignment8: Presentation of E-portfolio</p>
<p>Week 14 29 December</p>	<p>Evaluation</p> <ul style="list-style-type: none"> ✓ Evaluating lessons in relation to the syllabus goals ✓ Summary and evaluation of course

Week 15 5 January	FINAL EXAM
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IV. Assessments

Type of assessment	%
<p>Final exam – covering the whole course</p> <p>The final exam will be 2.5 hours long. It will be set on the work done over the whole semester. It will consist of free response questions involving analysis, application, and synthesis.</p>	30
<p>Course work (assignment, presentation and creating project and E-portfolio, micro-teaching)</p> <p>Assessed coursework is shown on the weekly schedule. Full details of each and the criteria by which it will be assessed will be given in class, well in advance of the date of submission.</p> <p style="text-align: center;"> 1. Assignment 1-2-3-4 (12%) 2. Microteaching 1-2 (8%) 3. Multimedia Project (10%) 4. E-portfolio (10%) </p>	40
<p>Midterm Examination</p>	20
<p>Attendance</p> <p style="text-align: center;">1. Attendance and punctuality</p> <p style="text-align: center;">Each absence without a medical report -1%</p> <p style="text-align: right;">A two hour session is -2</p> <p style="text-align: right;">A one-hour session is -1</p>	10

(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.** Do you actively participate in a polite and agreeable manner, as assessed by the instructor or mentor?

A student who participates well does the following

- ✓ Comes prepared for class: homework tasks complete, materials available
- ✓ Listens: actively, eyes on speaker, non-verbal signs of attention, does not chat to friends
- ✓ Responds: answer questions, responds when class asked for opinion
- ✓ Contributes: makes voluntary contributions to discussion. Contributions are relevant
- ✓ Evaluates self: changes behavior based on feedback (from students or instructor)
- ✓ Joins in activities with energy and enthusiasm, initiates rather than sits and waits
- ✓ Writes: records the lesson and own reflections during class, and later as necessary
- ✓ Assists the lesson: helps communication, finds solutions, helps in the running of the lesson

V. Requirement

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

VI. Resources

Ally, M. (2009). *Mobile Learning: Transforming the Deliver of Education & Training*. Marquis Book Printing, Canada

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.

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

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

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.

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.