Texas A & M University-Corpus Christi
College of Education
Department of Teacher Education
Instructional Design and Educational Technology Program
January 22—March 11

Course: IDET 5302.W01
Computing Applications in Education: On-line

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Web Resources http://interconnect.tamucc.edu

I. Catalog
Description: An introduction for the inservice teacher to contemporary uses of microcomputers in the public schools. Emphasis will be placed on both understanding the basic fundamental operation of the microcomputer and its utilization in the schools.

II. Rationale: This course focuses on use of the microcomputer in teaching. There are no prerequisites for this course.

The course is intended to have a practical focus which will assist you—a working or future teacher—in making better use of computers with your students. This survey course will focus on a number of strategies for use of computers in education. Instruction and activities will be delivered via the University’s BlackBoard 9.1 learning management system. A textbook is required.

A final “instructor approved” project is required for each of you. The project should be useful to you and should address a school-related question or problem of your choosing. Projects are subject
to instructor approval and should target application of one or more concepts covered in the course.

III. State Adopted Proficiencies for Teachers Addressed by the Course:

(Competency 007) The teacher uses effective verbal, nonverbal, and media communication techniques . . .

**Learner-Centered Communication:** . . . the teacher demonstrates effective professional and interpersonal communication skills. The teacher . . . uses media techniques so that learners explore ideas collaboratively, pose questions, and support one another in learning. The teacher and students . . . give multimedia presentations . . . and use technology as a resource for building communication skills.

(Competency 009) The teacher uses . . . technological resources . . . to support individual and group learning. Includes 1) appropriate uses of instructional materials and resources (e.g., computers, CD-ROM, videodiscs, primary documents, and AV equipment; 2) helping students understand the role of technology as a learning tool; 3) evaluating the effectiveness of specific materials and resources for particular situations.

**Learner-Centered Knowledge:** The teacher possesses and draws on . . . technology to provide relevant and meaningful learning experiences . . . The teacher stays abreast of current . . . technology. The teacher integrates technological resources so that learners consider the central themes of the subject matter from as many viewpoints as possible.

**Learner-Centered Instruction:** To create a learner-centered community, the teacher collaboratively identifies needs; and plans, implements, and assesses instruction using technology and other resources.
The teacher selects . . . technology . . . that is developmentally
appropriate and designed to engage interest in learning.

IV. Student Learning Outcomes

Students graduating from the Educational Technology Program will:

- apply and document skills and knowledge as educational technologists in order to solve appropriate real world instructional problems; (IDET 5397 is linked to this student learning outcome.)
- develop an original plan and instructional materials for integrating educational technologies in an overall instructional strategy; (IDET 5320 is linked to this student learning outcome.)
- demonstrate knowledge of the field; (IDET 5300, IDET 5303, IDET 5304, and IDET 5397 are primarily linked to this student learning outcome.)

V--TExES Competencies Addressed by the Course:

No TExES competencies or examinations in educational technology currently exist at the graduate level. However, all beginning teachers are expected to demonstrate the ability to meet the following Technology Applications (Standards I–V):

a) All teachers use technology-related terms, concepts, data input strategies, and ethical practices to make informed decisions about current technologies and their applications.

b) All teachers identify task requirements, apply search strategies, and use current technology to efficiently acquire, analyze, and evaluate a variety of electronic information.

c) All teachers use task-appropriate tools to synthesize knowledge, create and modify solutions, and evaluate results in a way that supports the work of individuals and groups in problem-solving situations.
d) All teachers communicate information in different formats and for diverse audiences.

e) All teachers know how to plan, organize, deliver, and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the curriculum.

VI. Courses Objectives: Upon completing this course, you should be able to:

1) describe and compare various student standards pertaining to uses of computers in learning including state-mandated student technology standards (Technology TEKS);

2) describe instructional uses of a variety of technological tools as per the course text;

3) describe the characteristics of meaningful learning with technology;

4) plan and develop a WebQuest for use by your students;

5) develop a communication project using Voicethread;

6) complete a successful mail merge in WORD;

7) demonstrate awareness of issues regarding equitable access to computers;

8) develop a student-centered concept mapping activity;

9) develop a student-centered multimedia activity;

10) explain the concept of Mindtools;

11) develop an example of Mindtools project;

12) choose to expand uses of computer-based resources with your own
students;
13) choose to pursue opportunities for additional training or education on appropriate computer usage in the schools;
14) develop a functioning final project to support learning using appropriate technology application(s) on an instructor-approved topic.

VII. Course Topics

Technology standards for students and the Technology TEKS

Google docs

Mindtools

WebQuests

Communication tools (i.e., Voicethread)

Mail merge

Concept mapping

Equity and technology

Multimedia

Spreadsheets

Jeopardy game development

VIII. Instructional Methods and Activities:

A variety of methods and activities will be utilized to enable students to achieve targeted course outcomes. Instructional methods will include online technology-
based demonstrations and guidance. The instructor will provide Internet-based resources and one-on-one, in-person assistance, if requested.

IX. Evaluation, Grading, Expectations, and Policies: Participants are responsible for the following:

1) completing all assignments;
2) doing all assigned readings;
3) developing an instructor-approved final project;
4) posting and reading comments in the course Discussion Forum as requested

Grading: You may earn up to 1000 points in this course. Students will be assigned grades as follows:

A: 900 or more points
B: 800 - 899 points
C: 700 - 799 points
D: 600 - 699 points
F: 599 points or less

NOTES: Course participants will require an Internet ready computer equipped with speakers (or headphones) and a microphone in order to complete assignments. A web cam is also recommended. Participants are also encouraged to establish a Skype account (if a web cam is or will be available) and required to establish a gmail account. Thank you.

Following are the point weightings for course assignments:

1) five Discussion Forum posts: 200 points total, 40 points each
2) Technology TEKS assignment: 50 points
3) WebQuest assignment: 70 points
3.1) Mail merge activity: 40 points
4) Voicethread assignment: 50 points
5) Mindtools assignment: 90 points
6) Google docs assignment: 30 points
7) Multimedia assignment: 60 points
8) Equity issues assignment: 50 points
9) Jeopardy game assignment: 50 points
10) Final project proposal: 20 points
11) Concept mapping assignment: 50 points
12) Final project: 240 points

Generally speaking, assignments will be graded on degree of completeness, functionality, instructional appropriateness, use of proper grammar and spelling, consistency with assigned readings and instructor guidance, and quality of appearance and formatting. Course participants may resubmit any assignment a second time for an improved grade, assuming revisions are made based upon the instructor’s feedback.

X. Course Calendar:

NOTES: 1) All assignments may be found in Course Content; 2) all completed assignments must be submitted via the original assignment in BB9; please do not submit your work as an attachment to a BB9 message or email. Thank you.

Please see Content and Activities in the course menu in Blackboard for all scheduled assignments and activities.

The course is organized in seven sessions as follows:

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Required Text: none

Bibliography


technology (4th Ed.). Columbus, OH: Merrill/Prentice-Hall.


Department of Education, Office of Educational Research and Improvement.


