PSC Technology Integration On-the-Job Assessment Instrument

If you are taking this course to meet the technology requirement for recertification, besides meeting all of the course requirements appropriately, you will also need to have your school's administrator complete, sign, and send this instrument to the course instructor before the end of the semester. (This is a PDF document. You will need Acrobat Reader, available for free from Adobe, to open and print the form.)

Introduction to Computer-Based Education

Summer, 2005

Everyday at Anytime
(or 5:15-6:00 pm for special meetings)

Ikseon (Ike) Choi
ichoi@uga.edu
604F Aderhold Hall
706-583-0794

Hiliary Johnson
hojohnso@uga.edu

Course Web site:
http://projects.coe.uga.edu/ikechoi/courses/edit6150/

Quick Links: Course Procedures | Course Requirements

Course Description

This course introduces educators to the range of educational computing applications. This course introduces ideas, concepts and strategies for integrating computers into classroom teaching. The focus of the course is on models for integration, but specific applications and how they can be used in the classroom will also be explored thoroughly. Students are expected to either gain technical skills during the class or have them prior to class. This course is designed to meet the Georgia Technology Standards for Educators as mandated by the Georgia Professional Standards Commission (http://www.gapsc.com/).

If you have a disability and would like to request accommodations, please contact the instructors.

Goals

- Understand and use various integration models in your classroom.
- Understand and use various software applications and apply their use in the classroom.

Standards-based Instructional Objectives (taken from the Georgia Professional Standards Commission)

- Demonstrate introductory knowledge, skills and understanding of concepts related to technology.
- Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.
- Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- Apply current research on teaching and learning with technology when planning learning environments and experiences.
- Identify and locate technology resources and evaluate them for accuracy and suitability.
- Plan for the management of technology resources within the context of learning activities.
- Plan strategies to manage student learning in a technology-enhanced environment.
- Facilitate technology-enhanced experiences that address content standards and student technology standards.
- Use technology to support learner-centered strategies that address the diverse needs of students.
- Apply technology to develop students' higher order skills and creativity.
- Manage student learning activities in a technology-enhanced environment.
- Apply technology in assessing student learning of subject matter using a variety of assessment techniques.
- Use technology resources to collect and analyze data, interpret results and communicate findings to improve

instructional practice and maximize student learning.
- Apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication and productivity.
- Use technology resources to engage in ongoing professional development and lifelong learning.
- Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- Apply technology to increase productivity.
- Use technology to communicate and collaborate with peers, parents and the larger community in order to nurture student learning
- Model and teach legal and ethical practice related to technology use.
- Apply technology resources to enable and empower learners with diverse backgrounds, characteristics and abilities.
- Identify and use technology resources that affirm diversity.
- Promote safe and healthy use of technology resources.
- Facilitate equitable access to technology resources for all students.

Hardware and software

Please refer to http://projects.coe.uga.edu/ikechoi/courses/edit6150/gettingready.html for required hardware and software.

Readings

Required Online Readings:

Introduction to Technology Integration

Hooper, S., & Rieber, L. P. (1995). Teaching with Technology. In A. C. Ornstein (Ed.), *Teaching: Theory into practice*, (pp. 154-170). Needham Heights, MA: Allyn and Bacon.

Charp, S. (2002). Educators' Acceptance of Computer Technology?. *T.H.E. Journal* , *29*(9) [On-line]. Available: http://www.thejournal.com/magazine/vault/A3953.cfm

Assessing Teachers' Use of Technology

Moersch, C. (2002). Measures of success: Six instruments to assess teachers' use of technology. *Learning & Leading with Technology*, *30*(3), 10-13, 24. [Online] Available: http://www.learning-quest.com/software/MeasurersOfSuccessNov02.pdf

Project-Based Learning

Grant, M. (2002). Getting a grip on project-based learning: Theory, cases, and recommendations. *Meridian: Middle School Computer Technology Journal* , *5*(1) [On-line]. Available: http://www.ncsu.edu/meridian/win2002/514/index.html

Using technology for authentic learning

Mims, C. (2003). Authentic Learning: A practical introduction and guide for implementation. *Meridian: Middle School Computer Technology Journal* , *6*(1) [On-line]. Available: http://www.ncsu.edu/meridian/win2003/authentic_learning/

WebQuests

March, T. (1998). *Why WebQuests? An introduction*. [Online] Available: http://www.ozline.com/webquests/intro.html

Using Technology for Constructionist Learning

Papert, S. (1991). Situating constructionism. In I. Harel & S. Papert (Eds.), *Constructionism* (pp. 1-11), Norwood, NJ: Ablex.

Rieber, L.P. (2004) *Homemade PowerPoint Games: A Constructionist Alternative to WebQuests* [On-line].

Available: http://it.coe.uga.edu/wwild/pptgames/ppt-games-paper.html

Skill Oriented Books/Resources:

Rieber, L.P. (2004). Getting up and running with Dreamweaver MX 2004: Building a professional portfolio [On-line]. Available: http://www.NowhereRoad.com
Dr. Rieber makes this text available at no charge to all my students.

Here are other skill oriented books to consider purchasing -- the use of external resources, such as these books and the available Interactive Courseware (see next section), is the main way you will learn the computer skill objectives of this course:

- Maran, R. (1999). Office 2000 Simplified, IDG Books Worldwide.
- Bruce, Betsy (2004). Teach Yourself Macromedia Dreamweaver MX 2004 in 24 Hours. Indianapolis, IN: Sams.

These books can also be found at several online book sellers, such as eFollett.com or Amazon.com.

Interactive Courseware Modules

In addition to the skill oriented books, this course provides everyone with access to online interactive courseware (also known as web-based tutorials) through ElementK. These online resources are available to all UGA students at no charge at the following web site: http://innergeek.uga.edu/

Outline of the Course

Integration Concepts

- **Visual Learning and Other Learning Theories**
- **Webquests**
- **Homemade PowerPoint Games**
- **Project-based Learning**
- **Cognitive Tools**
- **HyperMedia**
- **Constructionism**
- **Drill & Practice, Tutorials, Simulations and Games**

Technical Skills

- **Word**
- **Powerpoint**
- **Access or Excel**
- **Web Development using Dreamweaver**

The instruction on how to learn these technical skills is delivered through the following four means: skill oriented books (see above), interactive courseware modules (see above), the instructor (via class presentations and individual help), and lots of practice. Participants must use all four means to meet the technical skills of this course. The primary means of introducing these skills is via the books and online tutorials.

The instructor will be available to meet with you individually throughout the course to help you with technical skills. Of course, this means you will need to travel to Athens. Two special Saturday workshop/help sessions are planned on web design/developing featuring Dreamweaver MX (which is typically the most challenging set of skills you will learn in this course), and for special assistance with your Integrative Lesson Plan. Although attending these Saturday workshops are optional, your attendance is expected if you are having trouble and need one-on-one assistance. Please set aside this date your personal calendars now.

Course Procedures

The primary course content is delivered asynchronously in two ways - textbook readings and pre-recorded presentations. One of the most important asynchronous tools is a special web site has been created containing a **Learning Plan** for the course. This learning plan lists all course activities, along with due dates, in the general order in which they should be completed. A user account has been created for you. Your username is constructed as "first_last", and your password is the last 4 digits of your social security number. Think of your learning plan as your "headquarters" for completing the course.

The pre-recorded presentations are designed and narrated by the instructor. The average length of the pre-recorded presentations is about 45 minutes. About half of the presentations have been produced with a commercial tool called "Impatica", and the other half have been produced to be compatible with the Windows Media Player (WMP). The Impatica presentations will work on both Windows and Macintosh computers, however the WMP presentations are realistically only viewable on Windows computers. All of these pre-recorded presentations can be found on the course learning plan. Again, all of the pre-recorded presentations, readings, and other activities on the course learning plan need to be completed with care **prior** to the respective scheduled class because they are your main means for acquiring the course content.

You should be aware of that much of the work you will do will be completed independently. There will be many resources to assist you with your work (electronic, print and human-based), but you will need to put in considerable time on your own in order to meet the hopes described above. The instructor also expects that each participant will be engaged in discussions, contributing in substantial ways to the conversations. This requires that all participants come to the discussion sessions having done needed background work and prepared needed materials, so that we use the on-line time to develop our ideas. We expect that each participant will take an active role by contributing ideas and resources, posing questions, taking initiative, and helping other class members. Finally, we expect that all of our interactions will be carried out in the spirit of collaboration as we all work to improve our use of technology for teaching and learning.

If necessary, the entire class will meet online in the HorizonLive Virtual Classroom at a certain time. Details regarding the meeting schedule and the HorizonLive will be introduced in class.

I recommend you discipline yourself to work at least three to six hours everyday.

Student Support of HorizonLive

UGA provides special support to students enrolled in classes that use the HorizonLive classroom. Students may get assistance by e-mailing hlive@uga.edu or calling Student Technology Support (STS) at 706-542-3333. The STS help desk is open from 9am-10pm Monday through Thursday, 9am-5pm Friday, and 1-7pm Saturday and Sunday.

Assessment

All assignments are due as per the schedule distributed in class. No points are deducted if late, but assignments turned in on time can be revised and resubmitted **one time** within three days from the time you are given feedback if you are not satisfied with your grade. (Click here for the late policy.) The WebQuest and Open-Ended projects may be submitted no later than three days prior to the last day of class for a preliminary review (however, only **complete** projects will be reviewed).

All students will create an online portfolio as part of the class. The elements of that portfolio, the portion of your final grade, and the due dates are as follows:

Online WebCT Discussions	5%	by June 3
Productivity Tools Project	10%	by May 21
Cognitive Tool Project	10%	by May 22
Literature Summary/Critique Paper	15%	by June 7
Portfolio Web Site	10%	by June 7
Open-Ended Project	25%	by June 7
WebQuest	25%	by June 7

Grading Scale

A 91-100%
B 81-90%
C 71-80%
D 61-70%
F Below 61%

Below you will find the details about what is expected for each assignment in this class. I will follow these rubrics closely, so you should too.

Online WebCT Discussions Rubric

You are expected to lead one discussion on one of your two projects and also participate in other people's discussions. Each discussion will take place over the span of 2 days, so you are expected to participate in that discussion in a timely manner. The purpose of these discussions is to help the designers create the best projects possible. It's important that the comments be critical, but not negative or inflammatory. Comments such as "that's a bad idea" are inappropriate, but comments such as "I think the second part is undeveloped", "children of that age would have a difficult time understanding those directions" are expected and encouraged.

Here is the rubric for grading participation in the WebCT discussions:

Criteria	Points	Score
Participation in discussions of at least 2 projects (WebQuests or Open-ended) of other people.	1	
Participation in one's own design discussion of the open-ended project or the WebQuest project: Discussion begins with a "kickoff" note (see explanation below) that you compose and submit by 5:00 p.m., the day before your discussion session you signed up for, followed by appropriate replies to people's reactions over the 2 day period of the discussion.	1	
Post at least 10 comments or critiques of other people's projects (accumulated over the 2 project discussions in which you participate but not lead).	1	
Total out of 3		

Your "kickoff" note should consist of at least two paragraphs: 1) a general introduction; 2) description of your project idea. But feel free to add other information, such as questions you have about your design that you want input about.

Productivity Tools Project

In this assignment, you will use the various applications contained within Microsoft Office, primarily Word, PowerPoint, and Excel to create a variety of useful classroom resources (e.g. brochure, seating chart, calendar, business cards, hall pass, etc.). This activity is presented in the hypothetical context that you are a teacher about to start a new school year who finds out at the last minute that many necessary resources are not ready and must be created as quickly as possible. As a consequence, you will be shown where to find ready-made educational templates online in order to allow you to create each resource quickly. The idea is to learn how to find and use pre-existing educational templates for Microsoft Office in order to "work smarter, not harder"!

When finished, you will use WebCT's Assignment Tool to "submit" your project for evaluation. Please note that you will also need to include the resources you create during this assignment eventually to your online portfolio, so be sure to keep all of the files safe and sound during the course.

The details of this assignment can be found on the course learning plan. When you read the assignment details, you should note that it was written as a WebQuest. You will be creating your own WebQuest later in the course, so you are encouraged to pay attention to the way that the assignment is constructed. In particular, note how it presents a motivating context for completing the tasks it describes. (The evaluation rubric for this assignment is also contained in the assignment itself.)

Cognitive Tool Project

In this project you will use MS Excel (spreadsheet/numbers) or MS Access (database/words) to create a tool that your students can use to grapple with difficult concepts in your classroom. The computer allows you to do things you would not otherwise be able to do (affordance), so make sure that you choose something that exploits the technology. There will not be a proficiency element to this grade. Submit the file along with project documentation (as a Word document) for this assignment for grading using WebCT. The project documentation should describe the lesson, list the lesson goals, describe the procedures for how the students will use or work with the spreadsheet or database, and explain how the affordances of the spreadsheet or database activity will enhance student learning.

The idea is to develop a lesson plan that integrates either a database or a spreadsheet in a meaningful way to accomplish the learning goals of the lesson. The computer tool should be central to your lesson plan such that the lesson would not be possible without the tool. The goal of this lesson plan is **not to teach the tool**, but to use the tool to help teach about the content (e.g. using a spreadsheet to teach about economic principles). The lesson plan must be accompanied by at least one sample/example of the computer tool "at work" in your lesson.

You are to submit two things for this assignment: 1) lesson description (a Word doc is fine) and either an Excel file or an Access file showing either an example of what the students are either to create or use with the SS or DB; 2) a sample of the tool (Excel or Access) at work. The lesson description should just contain the basics of any lesson, such as the objectives for the lesson and the procedures to be carried out by the teacher with the students. Also include in the lesson a description of how the activity will take advantage of the affordances of the spreadsheet or database activity will enhance student learning. Be sure to include in your lesson description the steps students are going to use Access/Excel to complete the lesson. The sample document should be an example of what you ultimately would expect your students to create one from scratch. (The purpose of the sample is to show students what you expect them to create, in case they do not understand what to do.)

You do **NOT** have to actually implement this assignment, but it could be the basis of your open-ended project if you wish (the open-ended project DOES have to be implemented).

Criteria	Points	Score
Spreadsheet or database file submitted and works	1	
Lesson Description part of project documentation	1	
Lesson Goals part of project documentation	1	
Lesson Procedures part of project documentation	1	
Computer Affordance part of project documentation	1	
Total out of 5		

Portfolio Web Site

Although we will teach and support Dreamweaver in this class, you may use whatever tool you wish to create and maintain your portfolio. Every course assignment needs to be represented in your online portfolio (including the photo documentation required in the WebQuest and Open-ended projects). You need to create and upload a first draft of your portfolio to a web server (e.g. ARCHES) by the due date indicated in the learning plan. Be sure to add the URL of your online portfolio to your class profile right after you upload the first draft because this is the way your instructor and your classmates will have access to your web site. (An informal peer-critiquing activity will take place shortly after the due date for the first draft, so it is important that everyone's web sites be up and running on time.)

You then update your online portfolio continually until the end of the course, at which time it will be formally evaluated by the instructor. Please note that you are required to write a reflection of at least one paragraph (minimum of 4 sentences) for each course assignment. Indicate what you learned, what were the challenges, the impact on your students, and what you might do differently the next time (see portfolios from previous semesters for examples). Write your reflection in an appropriate place directly in your online portfolio.

Although a first draft of your portfolio is due during the course (by the date indicated on the course learning plan), it is understood that several projects will not be ready, such as the WebQuest and Open-ended projects. You should create "placeholders" in your online portfolio for those projects which would be updated by the time all projects are due at the end of the course. Again, your portfolio will only be formally graded at the end of course.

Projects and Project Documentation	All projects and accompanying project documentation is included. (9-10)	One or more projects is missing. Not all project documentation is included. (7-8)	Many projects are missing. Project documentation is missing or poorly written. (0-6)	_____/10
Reflections	Each project is accompanied by a well-written reflection. The reflection provides good insight to what was learned, what were the challenges, the impact on your students, and describes what you might do differently the next time. (9-10)	Each project is accompanied by a reflection. The reflections are written appropriately. (7-8)	One or more reflections are missing. Many of the reflections are written poorly or with little thought. (0-6)	_____/10
Graphics	Portfolio contains well-designed graphics; all graphics appear (no broken graphics links); all graphics have a purpose; cosmetic graphics do not distract or mislead. (9-10)	Portfolio contains graphics; all graphics appear (one or no broken links); most graphics appear to have a purpose. (7-8)	No graphics are used; two or more graphics do not appear due to broken links; many graphics are not related to the content. (0-6)	_____/10
Navigation	All relative and absolute links work; it is easy and intuitive to move around web site; links to other web sites open in new browser windows; links are well-named and well-placed on pages; links are placed in consistent locations on all pages to meet user expectations; graphics used as links are easy to understand or have labels. (9-10)	All links work; little or no disorientation as user moves around web site. (7-8)	One or more links do not work; names of links are vague or confusing; users get disoriented and find it difficult to get from one page to another. (0-6)	_____/10
Cosmetics/Aesthetics	Web site has an interesting look and feel; exhibits a positive mood or attitude; web site does not seem dull or boring; graphics used to enhance aesthetics do not interfere with learning or navigation; excellent graphic design; excellent use of limited number of fonts and font styles; excellent use of color (9-10)	Good over-all design as expected by a new designer. (7-8)	Web site is unattractive or unpleasant looking; overuse or poor use of background images; busy looking pages; too many fonts or inconsistent use of fonts, font styles, or font sizes; parts of a page all run together (no use of sections or zones); poor use of color (such as placing dark letters on a dark background)	_____/10

			(0-6)	
Total out of 50 _____				

Technology Integration Literature Summary and Critique

The purpose of this assignment is to introduce you to the technology integration literature and to apply this literature in your classroom practice. To complete the this paper**,** you need to read 5-10 articles relevant to technology integration. You are free to choose your own articles. However, it's recommended that you use the online readings listed above unless you already have other readings selected.

To submit this paper for evaluation by the instructor, simply put a link to it in an appropriate place somewhere on your online portfolio.

Here is the evaluation rubric:

Excellent	**Adequate**	**Poor**
Excellent overview and critique of technology integration models and literature; explicitly cites specific literature; thoughtful critiques of concepts and principles from the literature; Well-written (no spelling or grammar errors) using a strong narrative structure (effectively introduces and explains thesis using literature as support, ending with conclusions/implications); formatted properly using APA guidelines; meets minimal length requirements of 1500 words (approximately 5 pages, excluding title page and references) (15-20)	Provides a good summary of integration models; Adequately cites specific literature; Narrative style is somewhat choppy or fragmented; some grammar errors. Reads like a first draft. Or, paper uses simpler alternative structure where each article is summarized and critiqued individually without an overall thesis. (8-14)	Paper is poorly written and poorly conceptualized; literature not integrated; literature not cited properly. (0-7)
Total out of 20_____		

Open-ended Project

The Open-Ended Project is one of the two major projects in this course. As the name implies, the topic for this project is open, that is, you have the freedom to choose just about anything you want for this project. The assignment itself should cover between 1 and 5 class periods. You can design and implement a Homemade PowerPoint Game or a second WebQuest. You can find some instructional software and integrate it into a unit of your teaching. It is also permissible to implement the cognitive tool assignment you did earlier in the course.

Whatever topic you choose, you should discuss well the design for this assignment in WebCT before implementing. You should have a lesson plan and an evaluation of the project included in this assignment. The materials provided should allow other teachers to do this project with little effort in their classrooms.

There are three parts to this assignment: Design, Implementation, and Evaluation. First, you need to design or find the materials to be used, then design an instructional plan for their use (integration) in a classroom. Second, you need to actually implement, or try out, the materials with learners in the target audience. Third, you need to evaluate the instructional effectiveness of the materials and design by collecting data during the implementation phase, such as test scores, analyzing and interpreting these data, and reporting your evaluation in a clear way. The implementation can be on a small scale, just 3-5 students in the target audience are sufficient. However, the students MUST be representative of the target audience. For example, if you are designing for third graders, then you must use third graders in your implementation.

Here is the evaluation rubric:

Criteria	Points	Score
Lesson Objectives (Part of lesson plan) • Written in terms of what students will be able to know or do **after** completing the lesson)	2	
Lesson Prerequisites (Part of lesson plan)	2	
Materials and Resources (Part of lesson plan)	1	
Lesson Strategies (Part of lesson plan)	2	
Evaluation Plan (Part of lesson plan) • Written so as to evaluate lesson objectives, that is, based on student learning or performance	2	
Project Implementation • Involves a try out with at least 3 learners from the target audience specified in the objectives	2	
Evaluation Results • Results must be directly tied/related to evaluation plan and based on data directly related to student learning	2	
Photo Documentation	1	
Total out of 14		

Click here for tips for completing the lesson plan for the open-ended project.

WebQuest

The WebQuest Project is one of the two major projects in this course. Your WebQuest should be designed according to the criteria advocated by Bernie Dodge. The WebQuest itself should be developed as one or more web pages (HTML).

You should discuss well the design of your WebQuest topic in WebCT before implementing. The WebQuest you design should have a student The materials provided should allow other teachers to do this project with little effort in their classrooms.

There are three parts to this assignment: Design, Implementation, and Evaluation. First, you need to design or find the materials to be used, then design an instructional plan for their use (integration) in a classroom. Second, you need to actually implement, or try out, the materials with learners in the target audience. Third, you need to evaluate the instructional effectiveness of the materials and design by collecting data during the implementation phase, such as test scores, analyzing and interpreting these data, and reporting your evaluation in a clear way. The implementation can be on a small scale, just 3-5 students in the target audience are sufficient. However, the students MUST be representative of the target audience. For example, if you are designing for third graders, then you must use third graders in your implementation.

In order to get both points for "implementation results", you must report and interpret results of each of your implementations. Your results need to be based on data related directly to student learning. For example, each item in your evaluation rubric needs to be represented and data for each criterion found in the rubric needs to be presented. (You do not need to provide all raw data -- overall summaries of the data are sufficient.)

To get the point for "photo documentation", you need at least 3 photos of the students while they are actually *involved* in completing your lesson. Remember, do not take photos of student faces unless you have permission (from them and their parents). Instead, take the photos from behind as they work. (BTW, it's possible to blur faces with many graphics applications, such as Photoshop.)

Your WebQuest needs to have each of the building blocks listed below in the evaluation rubric as subtitles in your web page(s) that represent your WebQuest. You are encouraged to use one of the pre-existing templates made available on the WebQuest home page.

Criteria	**Points**	**Score**
Introduction	2	
Task	2	
Process	2	
Evaluation	2	
Conclusion	2	
Teacher Page • Be sure to include lesson objectives	2	
Project Implementation • Involves a try out with at least 3 learners from the target audience specified in the objectives (include this on the teacher page)	2	
Implementation Results • Results must be directly tied/related to evaluation plan and based on data directly related to student learning (include this on the teacher page)	2	
Photo Documentation	1	
Total out of 17		
