Course Number and Title:

EDUC 506
Integrating Technology into the Curriculum

Academic Credit:

3 graduate credits

Course Rationale:

Technology encompasses the tools and strategies for critical thinking, problem solving, using information accurately, appropriately, increasing productivity, and enhancing personal growth.

While educators are aware of the high level of technology integration in the classroom, many teachers are unprepared to use technology in their classrooms and do not know where to begin learning how to do so.

"The challenge is not simply to incorporate learning technologies into current institutional approaches, but rather to change our fundamental views about effective teaching and learning and to use technology to do so." (Higher Education in an Era of Digital Competition: Choices and Challenges by Donald E. Hanna and Associates. Atwood Publishing, 2000, p.61.)

The goal is to help students live, learn and work successfully and responsibly in an increasingly complex, technology-driven society. To accomplish this, it is essential that integrating technology into the curriculum be an integral part of a student's educational experience.

Course Description:

This course is designed to provide students with a practical understanding of educational technology, computer use and applications, integration of technology in classroom curriculum, and use of the World Wide Web as an information repository and learning tool.

This hands-on course will provide teachers with opportunities to use and explore existing hardware, software and Internet resources in order to incorporate them into the design process.

Each teacher will be expected to use course information to design an instructional unit that effectively integrates technology as a tool for enhancing the learning environment.

Place of Course in the Curriculum:

This course is one in a sequence of 12 (C&I) or 10 (SECP) courses, and is required of all students seeking an Education Masters degree with an emphasis in Curriculum and Instruction, or those seeking initial certification in the Graduate Teacher Certification program

Course Goals and Objectives:

The goals of this course are:

1. To create effective learning environments and experiences supported by technology

2. To understand and use Web 2.0 technologies

3. To develop computer literacy skills necessary to locate, evaluate, and use communication and information resources to support teaching and learning

4. To develop skills in integrating computers in different curriculum areas

5. To understand the concepts and skills outlined in the National Educational Technology Standards for Teachers

6. To identify the responsible, ethical, and legal uses of technology, information, and software resources

7. To evaluate software applications

8. To appreciate the range of technology applications available and what they can do to enhance educational practice and learning

Students who successfully complete this course will be able to:

- Describe the fundamentals of computers and educational technology

- Articulate why computers are essential components in society, the business world, and K-12 education

- Use the World Wide Web as a repository of the latest information and as an educational resource and learning tool for K-12 education

- Plan and design effective learning environments and experiences through the integration of technology resources and technology-based methods into everyday curriculum

- Select software and instructional media for use in classrooms

- Develop curricular activities that include computer applications and use hypermedia and multimedia programs.

- Apply educational strategies to use technology to serve students who have special needs

- model and teach legal and ethical practice related to technology use

- Create a teacher web presence using current technologies

Course Content:

Unit I   Integrating educational technology into the curriculum

- 21st century skills

Unit II   Communications, networks, the Internet and WWW

Unit III Application software productivity tools

Unit IV Integrating digital media

Unit V   Technology, digital media and curriculum integration

Unit VI Evaluating educational technology and integration strategies

- Assistive technology

Unit VII Information fluency

Unit VIII Security issues, ethics and emerging technologies

Methodology:

Methods of instruction that work well for this course include, but are not limited to:

    A. Reading and discussing journal articles covering current research and instructional theory on using the technology in the classroom
    B. Access websites
    C. Hands-on activities in learning and practicing with software
    D. Written Assignments
    E. Collaborative Group Work
    F. Whole Class and Small Group Discussions
    G. Presentations
    H. Demonstrations
    I. Videos
    J. Journaling
    K. Wikis
    L. Blogs
    M. Podcasts

Student Roles:

1. Read assigned material and be prepared to participate in discussions each week in both large and small groups. Students must be able to support positions with relevant research on topics covered.

2. Written assignments

3. Complete a research project to share with class (Power Point presentation, video, podcast, wiki, blog or other project format approved by instructor)

4. Maintain Del-icio-us account to store and share research information

5. Maintain a weekly journal to reflect on professional growth and development

6. Update portfolio with relevant artifacts in the appropriate teaching standards to demonstrate professional growth and development

Assessment:

Enter the method category and percentage assigned to each method. The total should equal 100%. Specify various evaluation tools which work best for the course: papers, reports, individual or group projects, discussion, participation, tests etc.

Example:

Weekly Discussion	20%
Weekly Journal	10%
Reaction/Reflection Papers	20%
Research Project	40%
Final Exam	10%
	100%

Development of a grading rubric in each category is strongly recommended for objective rather than subjective evaluation.

Bibliography:

Beck, J. (2002). Emerging literacy through assistive technology. *Teaching Exceptional Children,* 35(2), 44-48.

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Counts, E. (2004). Multimedia design and production for students and teachers. New York: Pearson.

Dell, A.G.; Newton, D.; Petroff, J. (2008). Assistive Technology in the Classroom: Enhancing the School Experiences of Students with Disabilities, 1st edition. Upper Saddle River, NJ: Prentice Hall.

Hanna, D.E. (2000). Higher education in an era of digital competition: Choices and challenges. Atwood Publishing.

Jonassen, D.; Howland, J.; Marra, R.; and Crismond, D. (2008). Meaningful learning with technology, 3rd edition. Upper Saddle River, NJ: Merrill.

Lever-Duffy, J. and McDonald, J. (2008). Teaching and learning with technology, 3rd edition. New York: Pearson.

Male,M. (2002). Technology for inclusion: Meeting the special needs of all students. 4th edition. Boston: Allyn & Bacon.

Mills, S. and Roblyer, M. (2006). Technology tools for teachers, 2nd edition. Upper Saddle River, NJ: Merrill.

Morrison, G. and Lowther, D. (2005). Integrating computer technology into the classroom, 3rd edition. Upper Saddle River, NJ: Pearson.

Roblyer, M. (2006). Integrating educational technology into teaching, 4th edition. Upper Saddle River, NJ: Merrill.

Sharpe, V. (2005). Computer Education for Teachers, 5th edition. Boston: McGraw- Hill.

Dates of Initial Approval and Revision:

Initial Approval:
Revised: June 2, 2010

Recommended Text:

Teachers Discovering Computers: Integrating Technology and Digital Media in the Classroom, 5th Edition
Gary B. Shelly
Thomas J. Cashman
Glenda A. Gunter
Randolph E. Gunter
ISBN-10: 1423911806 ISBN-13: 9781423911807

Supplemental Companion (Online)
http://oc.course.com/sc/tdc5/index.cfm

Reference/Resource Materials

Integrating Technology in the Classroom: Methods and Means

Today, most teachers have not only been exposed to the internet but also have access at home or at school. In fact, a large number of schools are being retrofitted to place the internet in every classroom. Even more exciting than this is the newest technology: Wireless. A school can purchase a 'Portable Classroom'. This consists of laptops networked together, allowing students to work at their desks WITHOUT wires. If the laptops are networked to a printer, students can print from their personal computer to the classroom printer. Imagine the possibilities!

Technology in Education Slideshare by Sandra Gutierrez

Teacher Resources Integrating Technology in the Classroom

Sites that Help Classroom Teachers
Helping teachers use the internet effectively

Integrating Technology in the Language Arts Classroom
This article was contributed by Janice Christy, M.Ed., English Department Chair, Louisa County High School, Louisa, Virginia.

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Resources for Assistive Technology in Special Education
Connecting the disability community to information and opportunities

Family Guide to Assistive Technology

21st Century Information Fluency
Digital Information Fluency (DIF) is the ability to find, evaluate and use digital information effectively, efficiently and ethically. DIF involves Internet search skills that start with understanding how digital information is different from print information, knowing how to use specialized tools for finding digital information and strengthening the dispositions needed in the

digital information environment. As teachers and librarians develop these skills and teach them to students, students will become better equipped to achieve their information needs.

[50 Useful Blogging Tools for Teachers](#)
Blogging is becoming more and more popular in the classroom. Teachers can blog to stay in touch with parents and students or they can incorporate blogs from all of the students as a learning tool. The beauty of the student blog is that children from Kindergarten to high school can blog. No matter how you use blogs in your classroom, these tools will help you get started, enhance your experience, or bring the students into the fun.

[ISTE National Technology Standards](#)
[21st Century Information Fluency](#)
Digital Information Fluency (DIF) is the ability to find, evaluate and use digital information effectively, efficiently and ethically. DIF involves Internet search skills that start with understanding how digital information is different from print information, knowing how to use specialized tools for finding digital information and strengthening the dispositions needed in the digital information environment. As teachers and librarians develop these skills and teach them to students, students will become better equipped to achieve their information needs.