

Eastern Illinois University
Department of Early Childhood, Elementary, and Middle Level Education
EDU 2022: Teaching and Learning with Technology in Classrooms

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Class Meetings: TR 1-2:15 p.m., Buzzard 1430
Semester: Fall 2016

Unit Theme: Educator as creator of effective educational environments, integrating diverse students, strategies, societies, subjects, and technologies.

Course Description: (2-1-2) This course, based on the national and state educational technology standards is designed to prepare teachers to integrate technology into the curriculum. This course will focus on the effective use of technology in teaching and learning.

Course Purpose: EDU 2022 is structured to offer teacher candidates opportunities to:

1. Practice and expand personal use of various kinds of hardware and software.
2. Use technology in the design of curriculum for constructivist teaching and learning.
3. Apply learning theory to evaluate quality technology experiences.
4. Make informed judgments about social and ethical issues involving technology.
5. Develop strategies and commitment to explore new and emerging educational technologies.

Textbook:

Cennamo, K., Ross, J. D., & Ertmer, P. A. (2014). *Technology integration for meaningful classroom use: A standards-based approach*. (2nd ed.) Belmont, Calif.: Wadsworth.

Supplemental Materials:

Flash drive

Teaching Models:

The Information-Processing Models

- Information-processing models emphasize ways of enhancing the human being's innate drive to make sense of the world by acquiring and organizing data, sensing problems and generating solutions to them, and developing concepts and language for conveying them (pp 10-13).

Joyce, B., Weil, M., & Calhoun, E. (2015). *Models of teaching*. (9th ed.). Boston: Pearson.

Dispositions: Candidates in the Department of EC/ELE/MLE will exhibit professional ethical practices, effective communication, sensitivity to diversity, the abilities to provide varied teaching practices evidenced in a supportive and encouraging environment.

Standards

Course requirements are aligned with the following standards:

- Illinois Professional Teaching Standards (IPTs): http://www.isbe.net/PEAC/pdf/IL_prof_teaching_stds.pdf
- Eastern Illinois University Professional Dispositions
<http://www.eiu.edu/clinical/forms/DispositionsforEIUCandidates.pdf>
- Illinois Social Emotional Learning Standards (SEL) http://www.isbe.net/ils/social_emotional/standards.htm
- Association for Childhood Education International (ACEI): <http://www.isbe.net/rules/archive/pdfs/20ark.pdf>
- National Association for the Education of Young Children (NAEYC):
<http://www.ncaete.org/Standards/ProgramStandardsandReportForms/tabid/676/Default.aspx>
- Association for Middle Level Education:
<http://www.amle.org/AboutAMLE/ProfessionalPreparation/AMLEStandards.aspx>

Course requirements and demonstrated competencies are aligned with the following standards:

- Nets Standards for Teachers: ISTE National Technology Project:
http://www.iste.org/Content/NavigationMenu/NETS/ForTeachers/2008Standards/NETS_for_Teachers_2008.htm
- NETS Standards for Students: ISTE National Technology Project:
http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS_for_Students_2007.htm

Course Outcomes

Students will be able to:

1. Review research studies of the effects and impact of technology on learning.
2. Evaluate ethical, legal and social equity issues pertaining to the impact of technology
3. Apply terminology of the field, including Web 2.0
4. Use, explore, and apply telecommunications opportunities: html editors as appropriate for teaching professionals, course management systems, videoconferencing, webcasts
5. Use and apply word processing, database, presentation and spreadsheet programs relating to teacher administration and the curriculum of elementary and middle schools.
6. Create multimedia learning options, especially interactive whiteboard (SmartBoard) tools and applications
7. Review and apply criteria to evaluate and select blogs, wikis, Web sites, educational software.
8. Design and produce appropriate technology supported instruction.
9. Reflect on the development of computer technology over time and implications of this history for instruction.
10. Practice strategies for continuous updating of computer literacy for teachers and students.
11. Practice ergonomics and proper care of computers and peripherals.
12. Design and maintain your own professionally appropriate website.

COURSE REQUIREMENTS	DEMONSTRATED COMPETENCIES	ALIGNED STANDARDS
PRODUCTIVITY	Performance includes: Creation, editing, evaluation of appropriate professional documents in text and multimedia. Application of spreadsheet, database, presentation, and communications programs to classroom tasks. Focus is on demonstration of computer literacy, integration literacy and fluency, information literacy and fluency.	ISTE Standard 2 IPTS 1G, 2L Dispositions: PEP, PTSL
WEB PRESENCE AND WEB 2.0	Performance includes: Review and evaluation of active, teacher maintained classroom Web pages. Creation and use of a personal professional Web site, posted to individual student's account on the EIU pen server. Creation and use of selected personal accounts with such programs and participatory services as a blog, wiki, discussion boards, delicious, flickr, digg, twitter, google docs., etc. Focus is on participation in and creation of cyber environments for education. The students will also learn how to edit video to record their own performance and save in appropriate formats (.avi, .qt, .mov, .mp4, or .wmv)	ISTE Standard 3 ACEI, 3.5 SEL: 2C IPTS 2F, Dispositions: PEP, EC
CURRICULUM INTEGRATION	Performance includes: Creation of a themed curriculum sequence based on a student selected essential question appropriate for the classroom. The themed curriculum project may include: Introduction and rationale based on Internet research, site evaluations, podcast, Inspiration concept map, Excel graph, webquest evaluated or created, video evaluated or created, Turning Point (student response system), handheld activities, SmartBoard activities. (Instructors may select stand-alone curriculum applications outside of the themed sequence.) Focus is on integrating and implementing several classroom technologies to investigate and present a single area of inquiry for diverse learners. Elements will be posted to the student's EIU (pen) website using file transfer protocol.	ISTE Standard 1 NAEYC 4b, 4c ACEI 3.1, 3.4, 4.0 AMLE 2 SEL: 2C IPTS 1G, 2F, 2L, 3E, 3N, 5C, 5N Dispositions: PTSL, SDE
DIGITAL CULTURE, CONTEXT AND IMPACT	Performance includes: Analysis of turning points and trajectories in computer history, present trends, terminology, and review of research, understanding and committing to strategies for keeping abreast of developments in educational technology. Focus is on	ISTE Standard 4 ACEI 1.0, 5.1 AMLE: 4 SEL: 3C

	critical understanding of the role of technology in today's global society and attention to outside influences on classrooms.	IPTS 3E Dispositions: SDE
DIGITAL CITIZENSHIP	Performance includes research and commitment to the welfare of society and of all children and youth.. Student may investigate the following technology-based issues: Assistive technology, copyright (RIAA & MPAA) and creative commons, net safety, privacy and security, AUP/CIPA and appropriate use, digital divides (economics, gender, race), job loss, Internet addiction, cyber bullying, social networking, gaming, real vs. Virtual libraries, virtual classrooms and online coursework, artificial intelligence, corporate controls, technology and health, technology and environment. Focus is on teachers as leaders by modeling best practice in educational technology.	ISTE Standard 4, 5 ACEI 5.1 IPTS 9S, 9T SEL: 3A, 3C Dispositions: PEP, SDE
PARTICIPATION	Performance includes display of professional dispositions, thoughtfulness, communication, and attention to course projects, assignments, and inquiries, prompt submissions, perfect attendance. Focus is on evident desire for excellence in teaching and learning with technology in classrooms.	ISTE Standard 5 ACEI 5.1, NAEYC 5 IPTS 9H Dispositions: PEP, EC
EVALUATIONS	The students will demonstrate their content knowledge of effective integration of technology in the classroom by completing assessment tools.	ISTE Standard 2 IPTS 1G, 2F, 3E NAEYC 4b Disposition: EC

CORE ASSIGNMENTS	DESCRIPTION	POINTS/DUE DATE	WEIGHTS
PRODUCTIVITY	Instructor will select classroom related projects created with word processing, publishing, spreadsheet, database, presentation, graphics, and communications programs.	Ongoing	10%
WEB PRESENCE AND WEB 2.0	Instructor will select classroom related projects: Review of active, teacher maintained, classroom Web pages. Creation and use of a personal professional Web site, posted to individual student's account on the EIU pen server using a file transfer protocol. Creation and use of selected personal accounts with such programs and participatory services as a blog, wiki, discussion boards, delicious, Flickr, digg, twitter, google docs., etc.	TBA	15%
CURRICULUM INTEGRATION	Students will develop a themed curriculum sequence based on a student selected essential question appropriate for the classroom. Instructors will select elements of the themed curriculum project. Included may be: Introduction and rationale based on Internet research, site evaluations, podcast, Inspiration concept map, Excel graph, webquest evaluated or created, video evaluated or created, PPT with Turning Point (student response system) , handheld activities, SmartBoard activities, computer generated books. Instructors may select stand-alone curriculum applications outside of a themed sequence.	TBA	15%
DIGITAL CULTURE, CONTEXT AND IMPACT	Reviews of research and related literature in technology education.	Ongoing	5%
DIGITAL CITIZENSHIP	Research and discussion projects in ethical issues in technology education.. Topics include: assistive technology, copyright (RIAA & MPAA) and creative commons, net safety, privacy and security, AUP/CIPA and appropriate use, digital divides (economics, gender,	Ongoing	5%

	race), job loss, Internet addiction, cyber bullying, social networking, gaming, real versus virtual libraries, virtual classrooms and online coursework, artificial intelligence, corporate controls, technology and health, technology and environment, technology and global community. Elements of course projects must adhere to copyright law and use with permission. Research and discussion may take place on an online learning environment, a class blog, a class wiki, etc.		
PARTICIPATION	Performance includes display of professional dispositions, thoughtfulness, communication, and attention to course projects, assignments, and inquiries, prompt submissions, perfect attendance. Focus is on evident desire for excellence in teaching and learning with technology in classrooms.	Ongoing	10%
EVALUATIONS	Instructor will select appropriate midterm and final exam formats.	TBA	10%
Optional Assignments	Students will complete optional assignments as determined by the instructor. SCHOOL-BASED PROJECT: Students are expected to participate in a school-based project using technology in local classrooms.	Ongoing	30%

Optional assignments:

Discussion boards, podcasting, digital storytelling, emerging technologies, Student Response Systems, digital photography, Paint, resumes, newsletters, iPads, and cover letters

Instructor's Policies for the Course as Appropriate (attendance, late assignments, etc.):

- Regular class attendance is a demonstrated professional disposition. Your instructor should be notified prior to any absence from class. Failure to do so will be recorded as an unexcused absence. Unexcused absences and/or multiple excused absences can impact the **PARTICIPATION** component of the final course grade.
- Punctuality is a demonstrated professional disposition. Arriving late for class can impact the **PARTICIPATION** component of the final course grade.
- Late written assignments will not be accepted. Late technology projects are subject to grade reduction at the discretion of the instructor.
- Student use of cell phones in class is discouraged unless for use with an assigned class project or activity.

Grading Scale: A = 93%-100%, B= 84%-92%, C= 75%-83%, D= 66%-74%, F = Below 66%

Web site for assistance with APA questions:

<http://owl.english.purdue.edu/owl/resource/560/01/>

Week	COURSE OUTLINE/ WEEKLY TOPICS
1	<ul style="list-style-type: none"> • Course outline and purpose • Syllabus/assignments • ISTE Technology Standards (students and teachers) • Hardware review • D2L Workshop •
2	<ul style="list-style-type: none"> • Productivity Microsoft Office: Word, Excel, PowerPoint, Publisher and activities • Open source and online productivity tools • Read and discuss Chapter 1
3	<ul style="list-style-type: none"> • Review and evaluate school/teacher websites • Elements of effective web design in education

	<ul style="list-style-type: none"> • Web design software (e.g. SeaMonkey) • Read and discuss Chapter 2
4	<ul style="list-style-type: none"> • What is a cloud? How do servers work? • Internet/WWW organization/IP addresses • Create web page framework • Read and discuss Chapter 3
5	<ul style="list-style-type: none"> • Web design elements • Work on websites • Read and discuss Chapter 4 •
6	<ul style="list-style-type: none"> • Video editing • Record video and edit according to course guidelines • Read and discuss Chapter 5
7	<ul style="list-style-type: none"> • Curriculum integration • Research on technology integration • WebQuests • Read and discuss Chapter 6
8	<ul style="list-style-type: none"> • SmartBoard operation • Lesson development using SmartBoard software • Student response systems • Alternative interactive formats (1:1 classrooms) • Read and discuss Chapter 7
9	<ul style="list-style-type: none"> • Integrating Google Tools for Education • Distance learning • Read and discuss Chapter 8
10	<ul style="list-style-type: none"> • Concept mapping • Read and discuss Chapter 9
11	<ul style="list-style-type: none"> • Discipline-specific technology software and hardware • Content related applications • Web-based Resources • Read and discuss Chapter 10
12	<ul style="list-style-type: none"> • Assessment with technology • Flipped classrooms • Read and discuss Chapter 11
13	<ul style="list-style-type: none"> • Digital Citizenship • Legal issues/Digital Millennium Copyright Act (DMCA) • Read and discuss Chapter 12
14	<ul style="list-style-type: none"> • Social media issues – uses and issues • Communication with stakeholders (e.g., family and community engagement)
15	<ul style="list-style-type: none"> • Class presentations • Summary and lessons learned
16	<ul style="list-style-type: none"> • Final Exam

Academic Integrity

"The Department of EC/ELE/MLE is committed to the learning process and academic integrity as defined within the Student Conduct Code Standard I. "Eastern students observe the highest principles of academic integrity and support a campus environment conducive to scholarship." Students are expected to develop original and authentic work for assignments submitted in this course. "Conduct in subversion of academic standards, such as cheating on examinations, plagiarism, collusion, misrepresentation or falsification of data" or "submitting work previously presented in another course unless specifically permitted by the instructor" are considered violations of this standard."

Student Success Center

Students who are having difficulty achieving their academic goals are encouraged to first contact their instructor. If needing additional help, please contact the Student Success Center (www.eiu.edu/~success) for assistance with time management, test taking, note taking, avoiding procrastination, setting goals, and other skills to support academic achievement. The Student Success Center provides individualized consultations. To make an appointment, call [217-581-6696](tel:217-581-6696), or go to 9th Street Hall, Room 1302.

Students with Disabilities

If you are a student with a documented disability in need of accommodations to fully participate in this class, please contact the Office of Student Disability Services (OSDS). All accommodations must be approved through OSDS. Please stop by Ninth Street Hall, Room 2006, or call 217- 581-6583 to make an appointment.

EDU 2022 References

*Denotes Unit Conceptual Framework References

Bissell, J., Manring, A., & Rowland, V. (2001). *Cybereducator: The internet and world wide web for K-12 and teacher education* (2nd ed.). New York: McGraw-Hill.

*Bloom, B. S. (1956). *Taxonomy of educational objectives. Handbook I: The cognitive domain*. New York: David McKay, Co.

Brewer, T. (2003). *Technology integration in the 21st century classroom*. Eugene, OR: Visions Technology in Education.

Brooks-Young, S. (2007). *Digital-age literacy for teachers: Applying technology standards to everyday practice*. Eugene, OR: International Society for Technology in Education.

Chien, M.T. (2012, Summer). How digital media is transforming education. *The Journal for Computing Teachers*.
<http://www.iste.org/jct>

Dice, M. L., & Goldenhersh, B. L. (2002). *How to create a professional electronic portfolio*. Dubuque, IA: Kendall Hunt.

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Hunter, M. (1982). *Mastery Teaching*. El Segundo, CA. Instructional Dynamics.

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- *Slavin, R. (1994). *Cooperative learning: Theory, research, & practice*. New York: Allan & Bacon.
- Standley, M. & Ormiston, M. (2003). *Digital storytelling with PowerPoint*. Eugene, OR: Visions Technology in Education.
- Tapscott, D. (1999). *Growing up digital: The rise of the net generation*, New York, : McGraw-Hill.
- Tiene, D., & Ingram, A. (2001). *Exploring current issues in educational technology*. New York, NY: McGraw-Hill.
- Worchester, T. (2003). *50 quick & easy computer activities*. Eugene, OR: Visions Technology in Education.
- Willard, N.E. (2002). *Computer ethics, etiquette, and safety for the 21st century student*. Eugene, OR: International Society for Technology in Education.

Helpful Websites:

The Horizon Report (current edition) <http://www.nmc.org/pdf/2013-horizon-report-HE.pdf>
 EDUCAUSE <http://www.educause.edu>

ISTE <http://www.iste.org>

Thinkfinity <http://www.thinkfinity.com>

Kathy Schrock's Guide for Educators: <http://www.kathyschrock.com>

WebQuests <http://webquest.org>

Edutopia <http://www.edutopia.org>

Zunal.com

SMART Exchange: <http://www.smarttech.com/Home+Page/Resources/SMART+Exchange>

Google Earth: <http://www.google.com/earth/index.html>

Learning in Hand: <http://learninginhand.com/>

Common Sense Media: <http://www.common Sense media.org/educators>

ITC: <http://www.eiu.edu/itc/>
