

EDCI 3308: Methods in Educational Media and Technology

A. MAJOR COURSE REQUIREMENTS:

- Creation of a webquest or virtual field trip
- Create a presentation
- Tech tools compilation
- Classroom gaming assignment
- Discussions- Flipped classroom, Google classroom
- Stormboard
- Quizzes
- Rubrics and spreadsheets
- Family communication assignment

B. LEARNING OBJECTIVES:

**Learning Objectives:** This class is directed toward the interests of K-12 educators. The following student learner outcomes will assist classroom teachers to integrate information technology into their curriculum:

1. Students will become familiar with the resources available on the Internet.
2. Students will understand the necessity of integrating information technology into the classroom.
3. Students will experience critical viewing of content through evaluation of Websites.
4. Students will demonstrate the ability to create and implement lesson plans which integrate information technology.
5. Define educational technology and its relationship to education and training;
6. Describe the implications of cognitive and behavioral psychology, adult learning theory, systems theory, and communications technologies for education and training;
7. Students will become familiar with Internet-based resources and opportunities that will enhance global and multicultural educational opportunities.

**Technology Applications EC-12**

Standard I. All teachers use and promote creative thinking and innovative processes to construct knowledge, generate new ideas, and create products. (Family communication assignment, Stormboard, presentation software)

Standard II. All teachers collaborate and communicate both locally and globally using digital tools and resources to reinforce and promote learning. (Gaming project, presentation software, Tech tools)

Standard III. All teachers acquire, analyze, and manage content from digital resources. (Tech tools, webquest/virtual field trip)

Standard IV. All teachers make informed decisions by applying critical-thinking and problem-solving skills. (Rubrics/spreadsheets; presentation software)

Standard V. All teachers practice and promote safe, responsible, legal, and ethical behavior while using technology tools and resources. (Discussions)

Standard VI. All teachers demonstrate a thorough understanding of technology concepts, systems, and operations. (Quizzes, Discussions)

Standard VII. 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. (Presentation, Tech Tools, Google Classroom, WebQuest and Spreadsheet)

Standard VIII. The computer science teacher has the knowledge and skills needed to teach the creativity and innovation; communication and collaboration; research and information fluency; critical thinking, problem solving, and decision making; digital citizenship; and technology operations and concepts strands of the Technology Applications Texas Essential Knowledge and Skills (TEKS) in computer science, in addition to the content described in Technology Applications Standards I–VII. (Tech Tools)

## ISTE STANDARDS

### Empowered Professional

#### 1. Learner

Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning. Educators:

- a. Set professional learning goals to explore and apply pedagogical approaches made possible by technology and reflect on their effectiveness.
- b. Pursue professional interests by creating and actively participating in local and global learning networks.
- c. Stay current with research that supports improved student learning outcomes, including findings from the learning sciences.

#### 2. Leader

Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.

Educators:

- a. Shape, advance and accelerate a shared vision for empowered learning with technology by engaging with education stakeholders.
- b. Advocate for equitable access to educational technology, digital content and learning opportunities to meet the diverse needs of all students.
- c. Model for colleagues the identification, exploration, evaluation, curation and adoption of new digital resources and tools for learning.

#### 3. Citizen

Educators inspire students to positively contribute to and responsibly participate in the digital world. Educators:

- a. Create experiences for learners to make positive, socially responsible contributions and exhibit empathetic behavior online that build relationships and community.
- b. Establish a learning culture that promotes curiosity and critical examination of online resources and fosters digital literacy and media fluency.

- c. Mentor students in the safe, legal and ethical practices with digital tools and the protection of intellectual rights and property.
- d. Model and promote management of personal data and digital identity and protect student data privacy.

### *Learning Catalyst*

#### 4. Collaborator

Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems. Educators:

- a. Dedicate planning time to collaborate with colleagues to create authentic learning experiences that leverage technology.
- b. Collaborate and co-learn with students to discover and use new digital resources and diagnose and troubleshoot technology issues.
- c. Use collaborative tools to expand students' authentic, real world learning experiences by engaging virtually with experts, teams and students, locally and globally.
- d. Demonstrate cultural competency when communicating with students, parents and colleagues and interact with them as co-collaborators in student learning.

#### 5. Designer

Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.

Educators:

- a. Use technology to create, adapt and personalize learning experiences that foster independent learning and accommodate learner differences and needs.
- b. Design authentic learning activities that align with content area standards and use digital tools and resources to maximize active, deep learning.
- c. Explore and apply instructional design principles to create innovative digital learning environments that engage and support learning.

#### 6. Facilitator

Educators facilitate learning with technology to support student achievement of the 2016 ISTE Standards for Students.

Educators:

- a. Foster a culture where students take ownership of their learning goals and outcomes in both independent and group settings.
- b. Manage the use of technology and student learning strategies in digital platforms, virtual environments, hands-on makerspaces or in the field.
- c. Create learning opportunities that challenge students to use a design process and computational thinking to innovate and solve problems.
- d. Model and nurture creativity and creative expression to communicate ideas, knowledge or connections.

#### 7. Analyst

Educators understand and use data to drive their instruction and support students in achieving their learning goals.

Educators:

- a. Provide alternative ways for students to demonstrate competency and reflect on their learning using technology.
- b. Use technology to design and implement a variety of formative and summative assessments that accommodate learner needs, provide timely feedback to students and inform instruction.
- c. Use assessment data to guide progress and communicate with students, parents and education stakeholders to build student self-direction.

### C. LECTURE OR DISCUSSION TOPICS:

- Use of digital devices to promote student engagement
- Strategies for effective technology integration
- Addressing technological barriers
- Use of multimedia in the classroom

- Promoting success of learners through technology
- Enhancing learner creativity

#### D. REQUIRED & RECOMMENDED READINGS

##### (REQUIRED)

eBook: Transforming Learning with New Technologies 2<sup>nd</sup> Edition

Robert W. Maloy , Ruth-Ellen Verock-O'Loughlin, Sharon A. Edwards & Beverly Park Woolf. ISBN-10: 0133389049 •

ISBN-13: 9780133389043 Publisher: Pearson, 2014

And

Instructional Technology and Media for Learning, 11/E

Sharon E. Smaldino, Deborah L. Lowther, Clif D. Mims, James D. Russell,

ISBN-10: 0133831655 • ISBN-13: 9780133831658, 2015 • Pearson