

#### **Common Course Outline for:** EDUC 2101, Educational Technology

### A. Course Description

1. Number of credits: 3

2. Lecture hours per week: 3 Lab hours per week: *None* 

3. Prerequisites: EDUC 1101

4. Co-requisites None

5. MnTC Goals: None

This course is designed to provide opportunities to explore and develop skills, using current technology platforms, software and formats; demonstrate the current best practices of using technology as a tool to enhance learning; integrating technology platforms in today's kindergarten through twelfth-grade classrooms; and raising awareness of technological accessibility tools that could meet the needs of students with impairments or disabilities.

### B. Date last reviewed: May 2019

# C. Outline of Major Content Areas

- A. Educational technology in the context of the learning process, the digital learner, and multimodal literacy
- B. Reflecting on digital inequality and the participation gap
- C. Foundations for effective technology integration (using learning theory for technology integration), for directed integration models (Direct instruction models), and for constructivist integration models (Student-centered models), Substitution, Augmentation, Modification, and Redefinition (SAMR) model
- D. Instructional software programs for the 21st-century learner, including simulations as instructional strategies, problem-solving instructional strategies, integrated learning systems, and instructional game teaching, as well as tutorial and remediation programs
- E. Technology integration planning model: identifying academic content and using national curriculum frameworks, including Wiggins' Understanding by Design
- F. Essential conditions within the classroom for effective technology integration
- G. Motivating and engaging learners, through use of technology, via
  - 1. Using the internet to access and assess online information
  - 2. Using web-based educational materials and digital content in teaching
  - 3. Inquiry-based software and web tools to promote learning
  - 4. Using communication technologies to enhance learning through interactive information exchanges and networking

- 5. Sharing information with multimedia technology tools
- 6. Promoting success for all learners and differentiation of instruction via assistive technologies
- 7. Using technology to enhance performance assessments, digital portfolios and one's own learning.

### **D. Course Learning Outcomes**

Note: If this course is included in the MnTC, in parentheses at the end of each outcome please type the word "Goal" and then the relevant MnTC goal number(s) and competency letter(s). Include any relevant goal #2 competencies here. Example: (Goal 8a, 2b)

Upon successful completion of the course, the student will be able to:

- 1. Articulate the social, ethical, legal, and human issues surrounding the use of information and technology
- 2. Demonstrate strategies for using educational technology in planning lessons, enhancing instructional strategies and techniques, and assessing learning 8710.2000, Subp. 4, Standard 3R, Standards of Effective Practice, diverse learners. A teacher must understand how students differ in their approaches to learning and create instructional opportunities that are adapted to students with diverse backgrounds and exceptionalities. The teacher must:
  - R. identify and apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- 3. Create an academic or functional lesson using interactive software

  Demonstrate understanding of and purposeful use of various software, platforms, and
  formats to enhance learning
- 4. Demonstrate proficiency with technology commonly in use in K-12 settings
- 5. Use technology to communicate effectively
- 6. Use technology in an ethical manner
- 7. Possess the ability to understand, consider, and choose to use technologies to enhance the curriculum, instruction, and students' learning as well as the classroom, school, and broader communities.
  - 8710.2000, Subp. 10, Standard 9M, Standards of Effective Practice., reflection and professional development. A teacher must be a reflective practitioner who continually evaluates the effects of choices and actions on others, including students, parents, and other professionals in the learning community, and who actively seeks out opportunities for professional growth. The teacher must:
    - M. understand the role of continuous development in technology knowledge and skills representative of technology applications for education.
- 8. Conduct efficient and effective web searches for professional purposes and evaluate web information sources, such as searching for standards on the Minnesota Department of Education website.

## E. Methods for Assessing Student Learning

- 1. Reflections of learning, based on rubric.
- 2. Participation in online discussions
- 3. Demonstration of using technology to design a data collection system
- 4. Demonstration of successful use of online communication system, class wiki, and online resources.

5. Interactive Platform Technology lesson/presentation based on rubi	5. Interactive Platform Technology lesson/presentation based on rubric.	