# NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY EDU 280 – INTRODUCTION TO INSTRUCTIONAL TECHNOLOGIES (3 CR.)

### **Course Description**

Provides future K-12 educators with the knowledge and skills needed to successfully implement instructional technology into their classroom. Explores the connections between types of technologies, technology standards, types of learners, and instructional practices. Lecture 3 hours. Total 3 hours per week

### **General Course Purpose**

EDU 280 enhances instruction and prepares teachers to create engaging learning environments using technology and media. Students apply their technology skills to create lesson plans, develop classroom instructional materials and reflect upon best practices in teaching. Students create and maintain a digital portfolio to showcase mastery of the International Society for Technology Education (ISTE) Teacher Standards.

## **Course Prerequisites/Corequisites**

Prerequisite: EDU 200 or departmental approval.

### **Course Objectives**

# 21st Century Learning

- Describe 2-3 characteristics of today's 21st-century learners and teachers.
- Explain the challenges of teaching in a 21st-century classroom.

### **Technology Standards**

- Compare and contrast the International Society for Technology Education (ISTE) Standards for Students with the ISTE Standards for Educators.
- Compare and contrast the Commonwealth of Virginia's Computer Technology Standards of Learning with the ISTE Standards for Students.
- In the context of one's certification area, explain the progression students will have to make in their technological skill development.
- Summarize why using technology in the classroom is important.

# Cyber Learning & Web 2.0 Technologies

- Define the term "Web 2.0".
- Define cyberlearning and explain why cyberlearning literacy is important in today's teaching and learning environment.
- Identify and explain at least 3 Web 2.0 resources that can be used to enhance student learning and
- Analyze at least 2-3 advantages and challenges of using Web 2.0 tools in the classroom.
- Create an eportfolio using a Web 2.0 tool.

### Planning for Technology

- Describe the steps to effectively plan for the implementation of technology in the classroom.
- Explain how technology can be used to support diverse learners in the classroom.
- Design a cooperative learning activity that incorporates technology in the learning environment with a technology-rich assessment.

#### Learning with Visuals and Audio

- Discuss the process of creating visuals and explain the basic principles of visual design that must be taken into account.
- Assemble an electronic presentation that uses the principles of universal design.

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- Create a video to support learning.

## Modes of instruction

- Apply knowledge of the "flipped classroom" to the design of a lesson plan.
- Create a lesson plan for a "flipped classroom."
- Explore virtual field trips.

# Digital Citizenship

- Discuss the advantages, limitations, and instructional applications of multimedia in learning.
- Demonstrate an understanding of online citizenship.
- Explain 8-10 core rules of netiquette.
- Discuss how to mentor students in safe, legal, and ethical practices when communicating online and working with digital tools.
- Apply critical thinking to assess validity of media messages.

## Major Topics to be Included

- 21st Century Learning
- Technology Standards
- Cyber Learning & Web 2.0 Technologies
- Planning for Technology
- Learning with Visuals and Audio
- Modes of instruction
- Digital Citizenship