Miami Dade College

Course Description

EME2040 | Creativity, Innovation, and Technology for the 21st Century Learner | 3.00 credits

The student will learn to manage a productive and safe technology environment by promoting creativity and innovation in the classroom. The student will gain 21st century knowledge, skills, and attitudes for applying technology across multiple disciplines and grade levels.

Course Competencies

Competency 1: Identifying the fundamental components of learning in the digital age by:

1. Defining the characteristics of all learners through current educational research and demographic studies
2. Recognizing technological learning needs in contemporary educational contexts
3. Identifying current and projected workplace skills through industry reports and research studies
4. Identifying the alignment between educational outcomes and workforce demands
5. Exploring the role of technology in shaping future career requirements
6. Comparing state and national learning standards related to digital-age skills
7. Discussing educational policies and their impact on digital-age learning
8. Examining research on effective virtual learning environments

Competency 2: Exploring the impact of technology on learning and its application in the classroom by:

1. Identifying how technology influences cognitive development and learning processes
2. Discussing strategies to integrate technology in ways that enhance learning and support all learners
3. Analyzing the effects of various technologies on student engagement and learning outcomes
4. Evaluating the effectiveness of technology tools and resources in promoting student learning

Competency 3: Developing and demonstrating digital literacy skills to guide all learners in becoming critical consumers and creators in the digital world by:

1. Identifying the rights, responsibilities, and opportunities of participating in an interconnected digital world, with emphasis on developing a professional digital presence as an educator
2. Researching strategies to help students cultivate and manage their digital identity and reputation, while emphasizing the permanence of digital actions
3. Demonstrating proficiency in evaluating accuracy, validity, origin, and relevance of digital content through systematic research approaches
4. Curating digital learning experiences that encourage positive, responsible contributions and foster meaningful online relationships and learning communities
5. Exploring research-based strategies that help students evaluate information accuracy and relevance while building knowledge through real-world problem-solving

Competency 4: Implementing safe, legal, and ethical technology practices while managing digital learning environments by:

1. Identifying security countermeasures and best practices
2. Interpreting and adhering to acceptable use policies while utilizing safe, legal, and ethical use of technology
3. Adhering to intellectual property rights through proper attribution and citation practices in digital environments
4. Describing effective management strategies for personal data and digital identity, ensuring student data privacy protection

5. Discussing comprehensive strategies to manage technology use and student learning in both physical and virtual classroom environments
6. Creating and maintaining clear protocols for device usage, digital communication, and online behavior expectations in educational settings

Competency 5: Developing the skills to foster creativity and innovation in all learners by:

1. Researching and defining the concepts of creativity, innovation, and inventiveness
2. Identifying learning environments that encourage curiosity while fostering digital literacy and media fluency
3. Experimenting with a variety of technologies in the design process
4. Selecting lessons, resources, and digital tools that enable learners to communicate clearly and express themselves creatively
5. Evaluating classroom activities and digital tools that support and promote creative and innovative thinking in all learners

Competency 6: Exploring the impact of design thinking on learning and its application in the classroom by:

1. Defining design thinking, focusing on the iterative process of critical thinking and creative problem-solving
2. Identifying technology-driven strategies and lessons that help learners understand, solve, and develop solutions to real-world problems
3. Explaining the rationale for including design thinking in the curriculum
4. Selecting and using digital tools to plan and manage design processes considering constraints and risks
5. Curating a variety of resources designed to enable teachers to integrate design thinking across grade levels
6. Creating a deliberate design process for generating ideas, testing theories, and solving authentic problems using a variety of technologies

Competency 7: Utilizing digital tools to enrich learning by collaborating with others and working effectively in teams by:

1. Utilizing collaborative technologies and participating in collaborative work groups using digital tools to connect with others
2. Contributing constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal
3. Utilizing collaborative tools to expand authentic, real-world learning experiences by engaging virtually with experts, teams, and peers