## AI-Enhanced Teaching, Lesson Planning & Digital Literacy Mastering AI for Curriculum Development, Research, IEPs, and Custom Chatbots A 3-credit Online Graduate Course Syllabus

Teacher Education Institute ©

## **Course Description**

This course provides educators with a comprehensive foundation in AI-powered teaching tools that can enhance curriculum development, digital literacy instruction, research strategies, and student engagement. Participants will explore AI-driven lesson planning tools, chatbot creation, IEP customization, and ethical AI use in education.

By the end of this course, educators will be proficient in integrating AI tools into their teaching practices, using technology to personalize learning experiences, streamline administrative tasks, and support diverse student needs, including those with IEPs (Individualized Education Programs).

• Hands-on AI Applications: Educators will create AI-enhanced lesson plans, develop personalized IEPs, build interactive chatbots, and analyze AI's role in research and digital literacy.

◇ Real-World Integration: This course focuses on practical AI use in K-12, higher education, and special education, ensuring that participants can immediately apply these skills in their teaching environments.

## **Course Materials**

Artificial intelligence is a highly dynamic topic and new information is produced rapidly. For this reason, there is no text to be purchased for this course. Reading assignments include all of the content within the fully developed online modules as well as web resources that are embedded within each module.

#### **Learner Outcomes**

Students will:

- Utilize AI tools to design adaptive, interactive lesson plans aligned with curriculum standards.
- Develop research skills using AI-driven platforms to gather, summarize, and organize academic materials.
- Create Individualized Education Programs (IEPs) using AI tools to customize learning experiences for students with special needs.
- Enhance digital literacy by teaching students how to responsibly evaluate and engage with AI-generated content.
- Develop custom AI chatbots that assist with instruction, grading, student Q&A, and interactive learning experiences.
- Implement AI ethically while balancing technology with teacher expertise and student-centered learning approaches.

## **Course Requirements**

*AI-Enhanced Teaching, Lesson Planning & Digital Literacy* is a 60 hour, three credit graduate level course completed over thirteen weeks. During the first week of the course, the participants will complete an introduction. There is a 1 week break built into the middle of the term and participants are allowed 2 weeks to complete the final assignment in module 10.

## **Course Components and Basis of Grade Determination**

Your grade will be determined by the course components listed below. (The items below are meant as a suggested guide for instructors).

| Course Component | Percent of Grade | Description          |
|------------------|------------------|----------------------|
| Reflection       | 90%              | Writing a Reflection |
| Video Assignment | 10%              | Recording a Video    |
| Total            | 100%             |                      |

# Grading

Final grades in the course are assigned based on the following grading scheme.

| А | = | 90-100 |
|---|---|--------|
| В | = | 80-89  |
| С | = | 70-79  |

## Hardware & Computer Skills Requirements

Students may use either a Macintosh computer or a PC with Windows 2000 or higher. Students should possess basic word processing skills and have internet access as well as an active email account. Students are also expected to have a basic knowledge of how to use a Web browser such as Internet Explorer, Mozilla Firefox, Safari, etc.

## **Student Requirements**

- 1. Participation: Actively participate in all activities
- 2. Reading assignments: Complete all readings and reflection assignments
- 3. Students are required to Design an AI-powered lesson plan, chatbot, or IEP customization strategy and submit a detailed report.
- 4. Course Evaluation

| <u>Assignment</u> | <u>Points</u> |
|-------------------|---------------|
| Participation     | N/A           |
| Assignments       | 60%           |
| Final Project     | 40%           |
| Total Points      | 100%          |

## **Student Academic Integrity**

Participants guarantee that all academic class work is original. Any academic dishonesty or plagiarism (to take ideas, writings, etc. from another and offer them as one's own), is a violation of student academic behavior standards as outlined by our partnering colleges and universities and are subject to disciplinary action.