The New York Center for Teacher Development, Inc.

In affiliation with the University of Massachusetts Global (Extended Education)

Course Syllabus

Course:	**EDZU 9119 Teaching with AI: Streamline, Simplify, Succeed, Smart Solutions for Stress-Free Teaching**
Credit Hours:	3.0 credits / 45 hours
Instructor:	**Keith Scharf**

Course Description

In today's fast-paced educational environment, artificial intelligence (AI) can be a game-changer for teachers K-12 seeking to optimize their workflow and enhance their students' learning experience. This course, *Teaching with AI: Streamline, Simplify, Succeed – Smart Solutions for Stress-Free Teaching*, empowers educators from elementary through secondary to leverage AI tools and techniques to transform the way they plan, teach, and manage their classrooms.

Throughout the course, participants will explore how to use AI for a variety of tasks that reduce workload and increase effectiveness. From planning units and lessons to creating engaging activities and differentiated instruction, this course provides hands-on strategies for integrating AI into the everyday teaching process. Additionally, educators will learn how to use AI to give personalized feedback to students and automate administrative tasks, freeing up more time for what truly matters – supporting student success.

Course Goals

To Know

1. The various AI tools that can enhance lesson planning, including ChatGPT, Khanmigo, Curipod, and others.
2. How AI can assist in creating differentiated lessons and activities for diverse student needs.
3. The ways AI can automate routine administrative tasks such as grading, feedback, and communication.
4. How to use AI to provide personalized feedback that supports student growth and understanding.
5. How AI can be integrated into the classroom to improve overall efficiency and reduce teacher workload.

To Understand

1. The role of AI in supporting student engagement and fostering personalized learning.
2. The strategies to integrate AI into curriculum design, lesson delivery, and assessment.
3. How to leverage AI tools to reduce teacher burnout by automating repetitive tasks and providing timely feedback.
4. The potential challenges and limitations of using AI in the classroom, and how to address them

effectively.
5. How AI can be used to track student progress and adapt instructional strategies to meet individual learning needs.

and To Be Able to:

1. Plan comprehensive units and design dynamic lessons that cater to different learning styles using AI tools.
2. Create interactive learning activities using AI-driven platforms, like Curipod and Magic School, to enhance student participation.
3. Differentiate instruction efficiently using AI to analyze student performance and suggest personalized learning paths.
4. Provide automated, yet personalized, feedback and assessments to students using AI tools such as Diffit and Magic School.
5. Automate routine tasks such as grading, scheduling, and communication, freeing up more time for impactful teaching.

Course Outline

Introduction to AI (ChatGPT, Magic School, Diffit, Khanmigo, Curipod)

- Course Announcements
  - Introduction to the course structure and expectations
- Course Expectations & Assignments
  - Overview of assessments and interactive components
- Forum Post 1
  - Introduction to the course community: share your teaching background and AI experience
- AI Tools Setup
  - Tools for the course: ChatGPT, Magic School, Diffit, Khanmigo, Curipod
  - Bookmark and set up accounts for AI tools
- Mini Quiz
  - Confirm successful setup of tools

Unit 1: Planning (Khanmigo, ChatGPT)

- Overview of Lesson Planning with AI
  - Using AI to refresh knowledge and enhance lesson planning
- AI Tools
  - Khanmigo: Learn feature
  - ChatGPT: Lesson planning and creative teaching ideas
- Forum Post 2
  - Discuss previous AI experiences in lesson planning
- Assignment 1-1
  - Khanmigo: Use “Learn” feature to brush up on a topic
- Assignment 1-2
  - ChatGPT: Generate a list of creative teaching ideas

- Forum Post 3
    - Reflect on which AI tools you'll use for planning in the future

Unit 2: Creation (Curipod, Magic School, Khanmigo)

- Overview of Creating Engaging Activities with AI
    - AI-enhanced presentations and interactive lesson tools
- AI Tools
    - Curipod: Enhancing and creating live lessons
    - Magic School: Generating activities for students
    - Khanmigo: Activity creation tools
- Forum Post 4
    - Share your experience with AI in creating classroom activities
- Assignment 2-1
    - Curipod: Enhance a previous PowerPoint/Google Slides presentation
- Assignment 2-2
    - Curipod: Create a live interactive lesson
- Assignment 2-3
    - Magic School: Create two activities for your class
- Assignment 2-4
    - Khanmigo: Create an activity or material for your class
- Forum Post 5
    - Share insights from the activity creation experience

Unit 3: Differentiation (Diffit, Khanmigo)

- Overview of Differentiation with AI
    - How AI can assist in creating personalized learning paths for students
- AI Tools
    - Diffit: AI-driven differentiation of lessons
    - Khanmigo: Differentiation tools and strategies
- Forum Post 6
    - Challenges of differentiation and current strategies used
- Assignment 3-1
    - Diffit: Explore differentiation features and apply them to lessons
- Assignment 3-2
    - Khanmigo: Apply differentiation tools to a lesson you've taught
    - Reflect on its effectiveness for future use

Unit 4: Giving Feedback (Magic School, ChatGPT)

- Overview of Using AI for Feedback
    - The role of feedback in student success and how AI can automate the process
- AI Tools
    - Magic School: Generating feedback for student work
    - ChatGPT: Providing personalized feedback and support

- Assignment 4-1
    - Magic School: Provide feedback on a student's written work
- Assignment 4-2
    - Diffit/Magic School: Create a multiple-choice assessment and export to Google Forms
    - Evaluate the AI-generated quiz content and usefulness
- Forum Post 7
    - Share your experience with AI feedback tools

Unit 5: Automating Administrative Tasks (Magic School, Khanmigo)

- Overview of Administrative Task Automation
    - Exploring AI tools that simplify non-teaching tasks (emails, rubrics, etc.)
- AI Tools
    - Magic School: Automating routine administrative tasks
    - Khanmigo: Tools for administrative assistance
- Assignment 5-1
    - Explore two administrative AI tools (from Magic School/Khanmigo) and use them for your tasks
- Forum Post 8
    - Discuss how AI can improve administrative efficiency

Course Wrap-up & Reflection

- Review of Key Learnings
    - Reflect on how AI tools have streamlined teaching practices
- Final Reflection Post
    - Summarize how AI has transformed your teaching approach
    - Share your plans for integrating AI into future lessons

Methods of Instruction

The course is broken into an introduction unit, five main units, and a wrap up lesson. During each, students are provided with a description of different AI tools, as well as examples of potential implementation. They are then asked to use the AI tool with a lesson that they have taught already to see how it can be used in a real scenario for them. After students employ the AI tool, they are asked to reflect on using it in a paragraph and evaluate if it is something they would use in their classrooms.

Students will connect with each other throughout the course within forums and various other types of online feedback options built into each class.

Methods of Assessment

Students will be graded on their completion of the assignments given in each unit. Assignments require students to learn new AI tools, apply them to their lessons, reflect on the experience using them, and evaluate the tools for potential use in the future. Reflections and Evaluations will be done on both forum posts and response paragraphs. Graduate students will be required to complete additional work, which can be used to organize as well as help provide turn-key training.

To earn a B for Graduate credit, students will create a 4 x 4 table that lists ways teachers can utilize AI (planning, giving feedback, etc.) along the top, and different AI tools (Khanmigo, Diffit, etc.) on the left. The intersecting boxes should describe how the AI tool helps teachers plan, give feedback, etc.

To earn an A for Graduate credit, students will create a 6 x 6 table that lists ways teachers can utilize AI (planning, giving feedback, etc.) along the top, and different AI tools (Khanmigo, Diffit, etc.) on the left. The intersecting boxes should describe how the AI tool helps teachers plan, give feedback, etc.

Instructors are online each day of the course and correspond with students through the course itself, feedback on assignments, and e-mail.

Time Validation

Task / Assignment Description	Estimated Time (in hours)
Read course overview and announcements. Familiarize yourself with the course goals, expectations, and navigation.	.25
Post in Forum 1: Introduce yourself. Share your teaching background and any prior experience with AI tools.	.5
Bookmark and set up accounts for AI tools. Create and verify accounts for ChatGPT, Magic School, Diffit, Khanmigo, Curipod.	.75
Complete setup confirmation quiz. Ensure all tools are accessible and functioning through a brief quiz.	.5
Post in Forum 2: Reflect on AI in lesson planning. Share any strategies or prior success using AI.	.5
Use Khanmigo's "Learn" feature. Review a topic and write a short paragraph about your experience.	1
Use ChatGPT to generate lesson ideas. Explore creative strategies and reflect on interesting outputs.	1.5
Deepen AI-Generated Lesson Plans. Revise one AI-generated lesson with added objectives, differentiation, and a short reflection.	1.5
Post in Forum 3: AI tool selection. Share which AI tools you plan to use for lesson planning and why.	.5

Post in Forum 4: AI in student activity creation. Describe any prior experience using AI in your teaching.	.5
Enhance a slide presentation using Curipod. Revise and reflect on how AI improved your materials.	1
Create an interactive lesson with Curipod. Design a new AI-powered lesson and compare it to your original.	1.5
Create 2 classroom activities with Magic School. Align them with your teaching style and reflect.	1.5
Create 1 classroom activity using Khanmigo. Evaluate its usefulness for your students.	1
Post in Forum 5: Share effective AI tools. Discuss which were most helpful in creating student activities.	.5
Post in Forum 6: Differentiated instruction challenges. Describe your current approach and obstacles.	.5
Watch Diffit tutorial and brainstorm uses. List 5 ways to support differentiation using Diffit.	1
Modify a lesson with Khanmigo for differentiation. Adjust for student needs and reflect on changes.	1.5
Use Magic School to give student feedback. Assess the accuracy and helpfulness of AI-generated comments.	1.5
Compare Two Feedback Tools. Use both ChatGPT and Magic School to give feedback on the same student sample, then analyze results.	1.5
Create a multiple-choice assessment. Use Diffit or Magic School, export to Google Forms, and reflect.	2.5
Post in Forum 7: Reflect on AI and assessment. Discuss the effectiveness of AI tools for feedback and tests.	.5
Explore AI admin tools (emails, rubrics). Try 2 administrative tasks and reflect on efficiency.	2
Post in Forum 8: AI and admin simplification. Discuss how AI can reduce teacher workload.	.5
Write a personal reflection on AI in teaching. Summarize how your teaching practice has evolved.	1
Post final reflections in forum. Share takeaways and plans for integrating AI.	1
Watch 5 short AI-in-education video tutorials. Take notes on practical takeaways.	2
Practice prompt engineering. Try 3 strategies to improve AI outputs and reflect on results.	2
Complete an AI Ethics & Student Privacy Case Study. Analyze 2 scenarios and post discussion responses.	1.5
Draft a Class AI Usage Guide. Based on privacy best practices, write student-facing guidelines for using AI responsibly.	1.5
Participate in Peer Review. Exchange AI-generated materials with a peer and provide structured feedback.	2

Create a full week-long AI-integrated lesson plan. Include assessments, differentiation, and tools.	3
Post in Forum 9: Anticipated challenges. Identify potential obstacles to AI implementation.	.5
Watch recorded expert Q&A session. Submit 3 takeaways and 2 follow-up questions.	1.5
Complete a self-assessment rubric. Evaluate your growth in AI competency throughout the course.	1
Build a mini AI resource library. Collect 5 tools, links, or guides to support future use.	1.5
Post in Forum 10: Favorite AI discovery. Describe a tool or technique that shifted your mindset.	.5
Final Tool Showcase: Select your favorite AI tool and create a short walkthrough or demo lesson using it.	1.5
Total (in hours)	**45**