

AI Literacy for California Educators

Course 9374 3 Semester Credits/Units

Instructor – Joe Herz

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Course Syllabus

Course Overview:

California's AB 2876, taking effect in 2025, will ensure all California students are provided with the skills and classroom learning experience needed to be safe, ethical and successful users of Artificial Intelligence. To facilitate this objective, California educators must develop guidelines and best practices to advance AI beyond just the use of current AI tools. Equip yourself with the knowledge, skills and foundational principles associated with empowering your students to engage with AI technology critically, ethically and responsibly to benefit their learning through real-world applications. *AI Literacy for California Educators'* guiding learning objectives:

- What knowledge, skills and practices are needed by educators to prepare students to work with Artificial Intelligence?
- What AI knowledge and skills are needed by students to enhance academic learning, manage digital information and embrace digital citizen responsibilities?
- How can Artificial Intelligence be effectively integrated into all grade levels and subjects?

Course Relation to CCS or other Professional Standards:

- [ISTE](#)
- [National and State Standards](#)

How to Submit Coursework

Submitting Assignments

Completed assignments can be shared via Google Drive OR as a word processing document or PDF placed in the corresponding assignment Dropbox in Moodle.

Google Drive Sharing:

- Gmail address to use: jherzdominancourses@gmail.com
- Suggestion: Create a shared Drive folder. Name it with your last name and EDUO 9374. i.e. Roberts EDUO 9374. Share/Notify me of the shared folder: Share/Add People (use my gmail). select Editor/check the Notify box/ Send)
- Share /Notify me of each document separately and please give me editing rights. Just placing the document in the folder will not generate a notification.
- Assignment names: include Your last name and *Assignment #*, i.e. RBrown EDUO 9374 Assignment 3

Moodle Dropbox Sharing:

- Do not save a Google Drive link in a dropbox, just word processing documents or PDFs. Google Drive documents must be shared directly from Drive. The instructor will be notified when you have placed an assignment in a Moodle Dropbox. Other assignments may require you notify the instructor by email when tasks are completed.

IMPORTANT: Make sure your name and the assignment number is located at the top of each document submitted. The file name must also include your last name, assignment # and course # i.e. Roberts, Module/Assignment 1 EDUO 9374.

Course Modules / Assignments

Module 1: California K-12 AI Literacy Guidelines	
Objective	Evaluate the implications of California's AI Literacy Guideline to your role as an educator.
Assignment(s) Include Activities and Needed Materials	<p>Assignment: Create a 2-3 page report on, the implications of AB 2876 to your work as an educator and, review State AI Guidance for K12 Schools, selecting two other state's AI policies to compare and contrast California' guidelines:</p> <p>AB 2876 This comprehensive guidance document from the California Department of Education addresses the implementation of artificial intelligence (AI) in K-12 education. It covers topics such as understanding AI, its potential uses in teaching and learning, ethical considerations, and implementation strategies. The guidance emphasizes the importance of human relationships in education, AI literacy, equity, and responsible use while exploring potential applications in classroom instruction and school operations.</p> <p>Unique aspects include:</p> <ol style="list-style-type: none">1. A focus on California-specific educational standards and initiatives.2. Emphasis on integrating AI skills with California's computer science standards.3. Guidance on developing AI in schools, not just using existing AI tools.4. Incorporation of the "5 Big Ideas of AI" framework for K-12 education. <p>Full Guidance Content</p> <p>Submit Assignment to the Module 1 Dropbox or via Drive within your shared course folder, to jherzdominancourses@gmail.com</p>
Assessment	All work will be assessed using the course Rubric found in this document.

Module 2: Basic Understanding of How AI Works	
Objective	Learn the variances and influences of AI sourcing, decision making and learning.
Assignment(s) Include Activities and Needed Materials	<p>Assignment: Selecting from one of the Assignment Completion Choices, create “Basics of Artificial Intelligence for Educators” for an audience of peers. The presentation will show your understanding of how generative AI works and your skills to communicate that understanding. You will need to get a bit technical. Do your best to take from the resources information that will allow you to build a personal knowledge of current AI usage and where it is possibly headed, and to then weave that knowledge into your presentation.</p> <p>1. General AI Understanding and applications. Use the following resources to learn the basics about Artificial Intelligence</p> <ul style="list-style-type: none"> • Discover The 5 Big Ideas Of AI With 2ring • Crash Course Artificial Intelligence (PBS) • Artificial intelligence • TED Talks on AI • Understanding What Artificial Intelligence Is, And What It's Not • 3 Simple Ways to Understand Artificial Intelligence (AI) <p>Submit Assignment to the Module 2 Dropbox or via Drive within your shared course folder, to jherzdominancourses@gmail.com</p>
Assessment	Assignments will be assessed using the Course Assessment Rubric. Feedback will be provided for each completed assignment.

Module 3: Teaching Methodologies That Align with AI Literacy	
Objective	Examine teaching methodologies that could help create align your teaching to create a comprehensive and engaging AI literacy program.
Assignment(s) Include Activities and Needed Materials	<p>Assignment: Examine each of the following. Utilize online resources, including AI chats. Defined each beyond the short descriptions given below. Write a <u>short summary of each 1-9</u>, in your own words including why each could or could not work in your current educational job.</p> <p>- Include either one recent (within 5 years) YouTube <u>or</u> one TED Talk link to support each of the 8 items.</p> <ol style="list-style-type: none"> 1. Foster Critical Thinking: Encourage students to think critically about AI's impact, ethical considerations, and potential biases1. 2. Hands-on Activities: Use AI tools and non-tech tools to help students how AI works. 3. Collaborative Learning: Promote group discussions, debates, and project to facilitate peer learning and diverse perspectives.

	<p>4. Interdisciplinary Approaches: Integrate AI literacy with other subjects such as math, science, language, social science to show its broad academic application.</p> <p>5. Engage with Experts: Partner with community and online experts to who use AI tools to assist in their profession.</p> <p>6. Promote Creativity and Innovation: Encourage students to develop their own AI leaning projects stemming from their creativity and suggested Project Based, community needs.</p> <p>7. Scenario-Based Learning</p> <p>8. Student-Centered Learning</p> <p>Submit Assignment to the Module 3 Dropbox or via Drive within your shared course folder, to jherzdominicancourses@gmail.com</p>
Assessment	Assignments will be assessed using the Course Assessment Rubric. Feedback will be provided for each completed assignment.

Module 4: Develop Efficient AI Inquiry Skills	
Objective	Learn effective prompt strategies needed to successfully extract from AI tools information and creative ideas that will specifically support curriculum development and classroom procedures.
Assignment(s) Include Activities and Needed Materials	<p>Assignment: When teaching students how to create effective AI search prompts, it's all about clarity and creativity. Research ideas and strategies to guide students in effective questioning practices.</p> <p>A. Create a set of guidelines to assist students. Use the most appropriate age and subject matter method to create the guidelines, choosing from the Assignment Completion Choices. If a set of guidelines would not be beneficial for students you work with, create a set to share with colleagues.</p> <p>B. Create two examples, items 1 and 2 below) of an AI chat search you used. Use this Prompt Document, shared via Drive (also found in Moodle) to submit your work.</p> <p>1. An example of a successful search based on effective prompt s that achieved your goal and perhaps extending it with new ideas.</p> <p>2. An example of a poorly executed use of prompts that resulted in information and ideas that did not achieve your goal. You may use the same topic and goal as in #1 but your prompts were poorly scaffolded and resulted in frustration.</p> <p>(Suggestion: Use several AI chat tools to assist with this assignment. Use standard internet searches for guidelines suggestions. Cross-reference results. Cite your resources using MLA or APA citing methods.)</p> <p>Submit Assignment to the Module 4 Dropbox or via Drive within your shared course folder, to jherzdominicancourses@gmail.com</p>
Assessment	Assignments will be assessed using the Course Assessment Rubric. Feedback will be provided for each completed assignment.

Module 5: Limitations of AI Usage	
Objective	How to recognize when AI is employed, understand its implications, assess and instruct students on the potential for AI to generate unethical, biased and misleading information.
Assignment(s) Include Activities and Needed Materials	<p>Assignment: Create a 2–3-page document about AI being used to create misleading and inaccurate information.</p> <p>There are 2 parts to this assignment.</p> <p>A. Focus on K-12 academic research by yourself and the potential to encounter false or misleading information and steps you would take to verify.</p> <p>B. Building on part A, what steps would you take to teach students how to assess misleading information.</p> <p>C. What AI cannot do successfully. Research the types of learning that that AI cannot handle effectively support. Report on how you can design curriculum that promotes human interactions and thinking.</p> <p>(Suggestion: Use several AI chat tools to assist with this assignment. Use standard internet searches. Cross-reference results. Cite your resources using MLA or APA citing methods.</p> <p>To get you started, read on part C, read <i>How teachers can get around the AI problem — and light up their classrooms in the process</i>, found in Moodle.</p> <p>Submit Assignment to the Module 5 Dropbox or via Drive within your shared course folder, to jherzdominicancourses@gmail.com</p>
Assessment	Assignments will be assessed using the Course Assessment Rubric. Feck will be provided for each completed assignment.

Module 6: Develop short and long-term AI Literacy plans	
Objective	Develop a short and long-term AI literacy plan for your professional development and for applying AI literacy to students’ academic, digital responsibility and social development.
Assignment(s) Include Activities and Needed Materials	<p>Assignment:</p> <p>A. Create a realistic short-term 3-month technology infusion plan. The plan will be enacted during the next 3-month period you are with students. The plan’s objective is to map out immediate curriculum alignment steps to work towards meeting AI literacy goals for your state and for any district or site AI use policies.</p> <p>Use this Google Document to create your short-term plan. Instructions are on the document.</p> <p>B. Create a realistic 2-year AI Literacy plan. The plan will be enacted over the next 1-2 years. Keep the plan realistic. The plan’s objective is to map out future alignment of your curriculum to meet AI literacy goals for your state and for any district or site AI use policies.</p>

	<p>Use this Google Document to create your long-term plan. Instructions are on the document. The planners are also available in Moodle.</p> <p>Submit Assignment to the Module 6 Dropbox or via Drive within your shared course folder, to jherzdominancourses@gmail.com</p>
Assessment	<p>Assignments will be assessed using the Course Assessment Rubric. Feedback will be provided for each completed assignment.</p>

Module 7: AI Centered Curriculum Development	
Objective	<p>Learn small steps and simple activities to revise existing and new teaching and learning practices that support AI Literacy through student engagement.</p>
Assignment(s) Include Activities and Needed Materials Assignment:	<p>Assignment:</p> <p>A. Revise a current lesson plan. Show the pre-course lesson and the post-course lesson revisions.</p> <p>B. Create two lessons that have AI Literacy objectives clearly woven into the lesson activities and assessment.</p> <p>Use this AI Literacy Unit of Study shell for both A and B.</p> <p>Refer to the Addendum for subtle and direct guidance on how to incorporate AI literacy into assignments.</p> <p>Submit Assignment to the Module 7 Dropbox or via Drive within your shared course folder, to jherzdominancourses@gmail.com</p>
Assessment	<p>Assignments will be assessed using the Course Assessment Rubric. Feedback will be provided for each completed assignment.</p>

Module 8 – Promoting AI Literacy	
Objective	<p>Prepare a presentation to a group of parents on AI Literacy.</p>
Assignment(s) Include Activities and Needed Materials	<p>Assignment: Selecting from one of the Assignment Completion Choices tools linked in the syllabus Addendum, create a presentation for an audience of parents at a classroom or a full school function. The goal of the presentation is go beyond just the fact that AI tools are being used in classrooms. Focus on the importance of students needing to be AI literate to successfully see the relationship of AI to their academic, character and digital responsibility development, and their future as consumers innovators in a career.</p> <p>Submit Assignment to the Module 8 Dropbox or via Drive within your shared course folder, to jherzdominancourses@gmail.com</p>
Assessment	<p>Assignments will be assessed using the Course Assessment Rubric. Feedback will be provided for each completed assignment.</p>

- **Assignment Completion Choice:** Unless a specific method is indicated in an assignment, choose the way you want to submit assignment so that it best suits the intended recipient(s). Select from word processing (Shared Drive or attached Word); presentation links or attached when possible (PP, Slides, Powtoon, Prezi, Canva); media shared or attached when possible (WeVideo, etc) Screencasts; Blog (Blogger); Podcasts, infographic. Consider using at least 2 different methods in the course.

Course Resources:

[AI Literacy: The Key to Responsible Use of AI in Education](#)

[The importance of AI literacy for all](#)

[AI Literacy, or Why Understanding AI Will Help You Every Day](#)

[AI Literacy In Today's World | Parmida Beigi | TEDxSFU](#)

[Revealing an AI Literacy Framework for Learners and Educators](#)

[Embracing the future of Artificial Intelligence in the classroom: the relevance of AI literacy, prompt engineering, and critical thinking in modern education \(alternate link\)](#)

[Fostering critical thinking with AI](#)

[Practical suggestions / Enhancing AI literacy](#)

[How to Teach AI Literacy](#)

[AI Literacy Lessons for Grades 6–12](#)

Course Assessment Rubric:

EXCELLENT	ACCEPTABLE	NOT ACCEPTABLE
Meets or Exceeds Course Objectives: A to A-	Majority of Work Meets Course Objectives; B+ to B-	Needs Considerable Improvement: Resubmit Work Suggested: C or below
All work submitted reflects in-depth understanding of course objectives.	Most work submitted reflects in-depth understanding of course objectives.	Work shows little or no in-depth understanding of course objectives.
Assignment responses show evidence of new knowledge evidenced by thoughtful, detailed and accurate assignment responses.	Most assignment responses show evidence of new knowledge evidenced by thoughtful, detailed and accurate assignment responses.	Responses show little to no evidence of new knowledge as evidenced by lack of thoughtful, detailed and accurate assignment responses.
Work submitted was organized and clearly articulated. The student carefully followed all assignment instructions. The instructor did not have to provide continual assignment clarification or request revisions.	Most work submitted was organized and clearly articulated. The student carefully followed all assignment instructions. The instructor had to provide continual assignment clarification or ask for revisions.	Work submitted was not organized or not clearly articulated. The instructor had to provide constant clarification and ask for continued revisions.
Assignment content and required projects were original.	Assignment content and required projects were original.	Evidence that not all assignment content and required projects were original.