Distributed by UW News Service, December 15, 2025

Link to original story: <https://www.uwosh.edu/today/128794/trailblazing-with-ai-uw-oshkosh-is-teaming-up-to-prepare-students-for-the-future/>

Trailblazing with AI: UW-Oshkosh is teaming up to prepare students for the future

Written by Grace Lim, University of Wisconsin–Oshkosh

Artificial intelligence isn’t coming—it’s here. And at the University of Wisconsin-Oshkosh, faculty across disciplines are making sure students are ready to thrive in an AI-driven world.

The University is charting a bold new course in artificial intelligence, led by a group of faculty and staff known as the AI Trailblazers—innovators helping UWO harness the power of AI to enhance teaching, research and community impact. The group includes faculty from business, education, nursing, information systems, the arts and computer science.

Chaired by Seon Yoon Chung, dean of the College of Nursing, Health Professions and STEM, the cross-campus task force is reimagining how a regional comprehensive university can prepare students for a future transformed by intelligent technology.

In spring 2025, the AI Trailblazers began meeting to explore how artificial intelligence could be woven into teaching, learning and workforce preparation across UWO’s colleges

.

“AI is touching every sector—from healthcare to education to manufacturing,” Chung said. “UWO’s role is to make sure our graduates and our community are ready to thrive in that future.”

She said that vision is guiding efforts across campus to ensure students not only understand AI but also use it responsibly and creatively in their chosen fields.

“We’re building a culture of practical and ethical innovation,” she added. “AI isn’t just about efficiency; it’s about creativity, care and expanding what’s possible for our students and partners.”

That vision is already taking shape in classrooms across campus. From computer science and business to education and nursing, faculty members are introducing students to the tools, concepts, and ethical questions that define the new AI era. The work of the AI Trailblazers has spurred new courses, certificate programs, and collaborations aimed at helping students understand—and responsibly apply—emerging technologies in their chosen fields.

For George Thomas, professor of computer science, this moment has been a long time coming. UWO’s computer science program has included artificial intelligence in its curriculum for nearly three decades and Thomas himself has taught the University’s AI course for the past 15 years.

When Chung shared her vision of expanding AI education beyond computer science, Thomas helped design *AI for All*, a new class tailored for students from any major.

“She talked about expanding knowledge of AI, especially generative AI, to everybody, not just computer-science majors,” Thomas said.

The course, launched in fall 2025, introduces students to large-language models and generative-AI tools through hands-on lab exercises.

“It’s half lecture and half lab,” Thomas said. “So far, they’ve worked with an LLM (large language model) in a variety of different domains. Sixteen students enrolled, only one from computer science, which is exactly what we hoped for.”

He said the biggest challenge has been simplifying complex concepts for beginners.

“I’m used to teaching AI to computer-science majors who know programming,” he said. “Now I’m teaching freshmen who may have no programming background at all. It’s been a challenge to distill the ideas to a level that still makes sense and is useful.”

Still, he believes AI literacy is essential for all students.

“It’s not that AI replaces humans, but that humans who use AI will replace humans who do not use it,” he said. “The key is being willing to adapt.”

For Dakota Miller, a first-year psychology major from Berlin, Wisconsin, *AI for All* provided a chance to explore an unfamiliar but exciting subject. She enrolled in the class to fulfill her computer-science general-education requirement after her father, who works in cybersecurity, recommended she give it a try.

Midway through the semester, Miller is beginning to see how AI could influence her chosen field.

“My goal is to become a speech and language pathologist, and I can see AI helping reduce the workload, maybe by automating certain assessments or generating therapy materials,” Miller said. “It’s exciting to imagine how it could support both professionals and clients.”

**Reshaping AI learning**

Jeremiah Bohr, assistant professor of information systems, joined the AI Trailblazers after teaching several courses on artificial intelligence. Bohr taught an Honors College seminar titled *Artificial Intelligence* in spring 2024, followed by *AI and Society* in fall 2024 and *Generative AI for Business and Data Analysis* in spring 2025. This fall, he is reshaping another course—*Introduction to Business Application Development*—which will be renamed *AI Applications in Business* in fall 2026, a required course for information-systems majors.

The first half of the course remains a conventional programming introduction; in the second half, students lean heavily into AI-mediated programming.

“It’s not just copying and pasting output from a chat window,” Bohr said. “We’re moving toward agentic tools, systems that can carry out multi-step tasks with some autonomy. You give them instructions and they can write files, run code and manage processes on your behalf. It’s a very different, much faster workflow and it’s already widely adopted in industry for routine tasks.”

In class, students use an open-source, no-cost-to-students stack connected to Google’s Gemini models inside a terminal. Bohr describes the broader practice as “AI-mediated coding,” commonly known as “vibe-coding”—teaching students to specify goals, provide rich context, and iteratively critique the model’s drafts until the software meets user specifications.

“Being good at AI is an emerging skill,” Bohr said. “It’s like being good at math or reading comprehension. You have to learn how to cooperate with an AI to get the results you want.”

While computer science and business classrooms explore generative tools, UWO’s College of Nursing, Health Professions and STEM is using AI to reimagine how students practice clinical communication.

Since joining UWO in Fall of 2024, Becca McLagan, a Teaching Learning Technology Specialist and member of the AI Trailblazers, is leading several pilot projects that use AI-powered video avatars to help students hone their therapeutic-communication skills.

“We build screen-based, interactive video avatars to meet the needs of the curriculum,” McLagan said. “If students need practice with therapeutic communication, we can build an AI avatar to act as a client. The student can converse with the avatar and practice their communication and diagnostic skills.”

UWO’s first AI patient, “Maggie,” allows nursing students to conduct full assessments—from introductions to symptom review—through a conversational interface on their laptops. Students gather background details such as name, age and health history while learning to manage the nuances of patient interaction. After the simulation concludes, Maggie also provides feedback on how students did based on a pre-determined rubric.

Sophomores Megan Waller of Rosendale and Madeline Marrazzo of Neenah are among the first to use the technology. In their *Fundamentals of Nursing* course, they log in to “meet” their digital patients and conduct full health assessments before ever setting foot in a clinical setting.

The experience, they said, feels surprisingly real and extremely helpful. They can ask questions, practice sensitive conversations, and even observe avatars displaying symptoms like coughing or pain.

“It’s nice to be able to gain information and know how to ask about certain touchy subjects when you’re talking to an AI avatar, because you can practice without the pressure of a real patient,” Marrazzo said.

Waller added, “After working with Maggie, I feel much more comfortable talking to real patients. Practicing with AI patients helped me find the right words and confidence before walking into the hospital.”

McLagan said the project has attracted wide interest: “To my knowledge, we’re one of the first universities to pursue this kind of screen-based AI simulation.”

**Interactive avatars and study bots**

McLagan also collaborates with John Bellotti, instructional program manager in the School of Business, on a second pilot called *AI Study Buddy*. The project trains AI bots on key open-access course resources so that students can converse with them as part of their study process. The bots are designed not to provide direct answers, but to encourage critical inquiry and problem-solving, helping students engage more deeply with the material rather than simply memorizing it.

Bellotti’s work builds on that idea by introducing AI-powered interactive avatars and study bots in business courses that simulate real-world professional scenarios—from customer-service, conflict resolution and sales negotiations to job-offer discussions and accident investigations. Bellotti said the avatars provide students with a safe and realistic environment to practice complex workplace situations—from managing employee performance issues to negotiating deals or resolving conflicts. By role-playing these challenging conversations, students can build confidence and receive consistent, immediate feedback.

To ensure quality and accessibility, Bellotti and his team also use video avatars to deliver uniform short lectures across multiple course sections—maintaining consistent content while freeing instructors to focus on mentoring and authentic assessment.

He’s now developing AI bots that act as tutors in key business concepts such as sales questioning, market segmentation, targeting and positioning. Another project, AIDEN, supports instructors in designing assignments that are more resilient to AI misuse while fostering creativity and independent thinking.

Bellotti’s overarching study, *Learning Through Interactive Avatars*, will be presented at the Online Learning Conference this November in Orlando. His session, *Arguing with AI: Building Emotionally Charged Interactive Avatars for Real-World Situations*, will highlight how these tools are transforming active learning in higher education.

“The students can do these scenarios anytime because unlike a traditional role-play, they can occur at 1 a.m. if that’s what works for them and the students still get an authentic experience,” he said.

Beyond STEM and business, faculty in other colleges are finding discipline-specific ways to integrate AI into teaching and research.

In the School of Education and Human Services, College of Public Affairs and Education, Nari Kim, professor of leadership, literacy and social foundations and a member of the AI Trailblazers, is developing a new undergraduate course, *AI in Education*, set to launch in fall 2026 as part of the Applied AI Certificate.

Designed through the lens of learning and instructional-design theories, the course will guide future educators in exploring how artificial intelligence can enhance teaching and learning across varied environments. Students will learn to leverage AI to design instructional strategies and materials, foster critical thinking, and meet the evolving needs of new generations of learners.

As the Applied AI Certificate takes shape, the Trailblazers continue to collaborate across colleges to prepare students—and the region—for an AI-infused future. Their work reflects a growing recognition that artificial intelligence is not a passing trend but a defining force in education, business and community life.

Tracy Slagter, director of the Center for Excellence in Teaching and Learning, and Stewart Cole, professor in the School of Public Affairs and Global Engagement, are also part of the team, helping faculty across disciplines explore and critically access how AI can enhance teaching, research and outreach.

And under Chancellor Manohar Singh’s leadership, UW-Oshkosh is embracing AI as part of a broader mission to foster innovation and strengthen Wisconsin’s economy.