Megan Lancaster, PMP®

Senior Learning Experience Designer · STEM Educator · AI Builder

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Summary

Learning designer, STEM educator, and PMP-certified project manager who enjoys working with teachers and finding practical ways to use AI in education. Finds joy in building tools that make others' work easier and create new possibilities for learning. At Duke, led the design and delivery of more than 50 online courses and developed AI-powered tools for a variety of teaching and learning needs. Earlier experience includes K–12 teaching and leading professional development for nearly 100 teachers. Brings classroom experience, thoughtful design judgment, and a willingness to build, share, and improve ideas with the people who will use them.

Professional Experience

Senior Learning Experience Designer and Project Manager

Duke University | Durham, NC (Remote) | April 2021 – Present

- Directed learning design and delivery for 50+ online courses and Specializations across STEM, healthcare, and business, reaching 377,000+ enrollments.
- Developed STEM curriculum and learning experiences across K–12 and higher education, translating standards and accreditation requirements into essential questions, clear learning goals, sequenced practice, and aligned assessments.
- Built a portfolio of AI tools and AI-powered learning experiences with the Claude API, Claude Code, and Claude Skills, including a Skill library encoding our course design process, an interaction generator with a custom Coursera plugin, and interactive AI-literacy activities for nurses; design each with structured prompts, guardrails, automated checks, and expert review.
- Guided multidisciplinary teams from inception through launch, defining project scope, aligning competing stakeholder priorities, and balancing quality, capacity, and release timelines across complex academic partnerships.
- Designed hands-on coding environments, branching scenarios, and case-based learning for technical audiences, and co-designed Coursera's platform-wide integrated labs interface using Universal Design for Learning (UDL) principles; refined experiences through rapid prototyping, expert consultation, and learner data.
- Standardized course production by authoring design guides and planning templates adopted across 25+ published courses; trained faculty, corporate education partners, and instructional designers on quality frameworks and best practices.
- Enhanced team productivity and capability by developing quality review frameworks, resource planning tools, and AI-assisted workflows while mentoring junior designers in project scoping and learning design judgment.

Learning Experience Designer

Duke University | Durham, NC (Remote) | January 2020 – April 2021

- Led design sprints with faculty across Duke University and Duke Health; built interactive prototypes and assessments and used learner analytics and faculty feedback to refine them.

Educational Technology Specialist

High Point University | High Point, NC | July 2018 – December 2019

- Coached 100+ faculty through campus-wide learning technology initiatives; created and scaled Blackboard Bootcamp, improving faculty confidence by 32% and reducing support requests by an average of 18%.
- Designed the university's first cross-disciplinary Pathway system using e-portfolios and achievement badges; analyzed adoption and engagement data to guide improvement.

Learning Specialist (K–5 Engineering Education)

UNC Greensboro | Greensboro, NC | August 2015 – December 2017

- Led engineering design process sessions in a week-long summer institute for 20 to 30 elementary teachers from Title I schools in Guilford County; teachers worked through full Engineering is Elementary units as their students would, testing materials and making evidence-based design decisions.
- Coached teachers through the school year as they brought units such as water filters, windmills, and maglev into their classrooms; developed mixed-methods evaluation instruments to inform program and district planning.

Instructional Designer and Project Manager

UNC Greensboro | Greensboro, NC | September 2013 – July 2015

- Managed online course development teams of faculty, multimedia developers, and designers; designed and launched UNCG's first MOOC and supported course development across disciplines in Canvas and WordPress.

STEM Teaching and Research

- **Virtual Mission Flight Director, Challenger Learning Center (2024-2025):** led virtual Moon and Mars missions through a NASA educator program, prepared supporting curriculum with K-12 teachers, and provided live support to teachers and students.
- **Science Teacher, New Garden Friends School (2014-2015):** designed and taught middle school science and high school environmental science using hands-on, guided inquiry and NGSS.
- **STEM Instructor and eStudies Academic Consultant, Duke TIP (2011-2015):** designed and taught Roller Coaster Physics, Engineering of Space Exploration, Digital Circuit Design and Analysis, and Engineering Technology for the Digital World; trained instructional staff.
- **Graduate Teaching Assistant, NC State and UNC Chapel Hill (2011-2013):** Methods of Teaching Science, Teaching and Learning Physics, General Physics II recitation, and Electronics I Lab.
- **Scholarship:** Peer-reviewed publication in the Journal of Research in Science Teaching; additional publications in Science Scope. Presented at UPCEA Distance Teaching & Learning, Coursera Conference, NARST, and AERA.

Education and Certification

M.Ed. Science Education | North Carolina State University
M.S. Engineering Physics | Appalachian State University
B.S. Physics | University of North Carolina at Greensboro
Project Management Professional (PMP) | Project Management Institute

Skills and Recognition

AI building: Claude API, Claude Code, Claude Skills, Claude Design, ChatGPT; system prompt design, few-shot examples, knowledge grounding, guardrails, structured JSON outputs, multi-step app flows, automated checks and test suites

Learning design: Learning strategy, Universal Design for Learning, design thinking, educator coaching, learner feedback, data-informed iteration, project scoping, and cross-functional collaboration.

Platforms: Coursera, Canvas, Blackboard, WordPress, PlayPosit, Monday.com, Articulate Storyline and Rise, Vyond, Camtasia, Adobe Captivate, Illustrator, EdStem

Recognition: Coursera Vision & Values Award (2025); Duke Presidential Award (2021)