AI-RESILIENT

Course Design Framework

1 Instructional Needs Analysis

- Define learning goals using higher levels of Bloom's Taxonomy.
- Analyze learners' prior knowledge, digital literacy, and AI usage.
- Consider delivery mode, institutional AI policies, and tech tools.

2 Curriculum and Course Structure

- Align outcomes with 21st-century skills and AI literacy.
- Organize content into flexible, reusable learning units.
- Use a mix of conceptual, application, and reflection modules.

3 Instructional Strategies

- Apply active learning: case studies, Socratic questioning, collaboration, debates.
- Scaffold AI use: teach prompt engineering, fact-checking, citation.
- Include AI-detection checkpoints with reflective annotation or oral explanations.

4 Assessment Design

- Use authentic assessments: portfolios, presentations, design tasks.
- Require process documentation and critical reflection.
- Include AI-resilient tasks: in-class essays, scenario-based tasks.

5 Feedback and Evaluation

- Provide formative feedback loops and peer/self-assessments.
- Use AI tools for feedback with human reflection.
- Leverage learner analytics for adaptive instruction.

6 Ethics and Digital Literacy

- Teach AI ethics: bias, hallucination, data privacy.
- Discuss academic integrity and evolving norms.
- Use ethical case studies involving AI.

7 Continuous Improvement

- Use analytics and feedback to refine.
- Stay updated with AI trends in education.
- Promote faculty collaboration on AI-resilient practices.

Sources

- MIT Sloan – AI-Resilient Learning Experience Framework
- Liberty University – Ethical Considerations in AI Instructional Design (PDF)
- ARCHED Framework – Human-Centered AI in Education (arXiv)

AI-TRANSPARENT
Design Choices

Assignment Instructions

- Require students to disclose and document any AI use.
- Ask for screenshots or transcripts of AI interactions.
- Include prompts like: “Describe how AI contributed to your work.”

Assessment Criteria

- Evaluate the student’s ability to critically reflect on AI use.
- Include a rubric category for ethical and effective AI integration.
- Assess originality and human input alongside AI contributions.

Student Reflection

- Require a reflection section: What did AI generate? What did you revise?
- Ask students to compare their own ideas with AI suggestions.
- Encourage discussion of AI limitations or biases encountered.

Example Assignments

- AI-assisted writing with annotated revisions.
- Compare and critique AI-generated vs. student-generated content.
- Prompt engineering tasks with rationale and outcome analysis.

Academic Integrity

- Clearly define acceptable AI use and citation expectations.
- Require attribution of AI tools (e.g., “Generated with ChatGPT, July 2025”).
- Emphasize transparency over prohibition.

AI-RESISTANT
Design Choices

Assignment Instructions

- Clearly state that AI tools (Co-pilot, ChatGPT, Gemini) are not permitted.
- Emphasize the importance of original thought and independent work.
- Include honor statements or integrity pledges with submissions.

Assessment Criteria

- Prioritize originality, critical thinking, and personal voice.
- Evaluate process and development over final product alone.
- Include criteria for personal relevance, creativity, and depth of analysis.

Student Reflection

- Ask students to reflect on their learning process and how they arrived at their conclusions.
- Include metacognitive prompts like: “What challenged you most in this task?” or “How did your thinking evolve?”
- Use in-class reflection journals or exit tickets.

Example Assignments

- Hybrid and In-person- Handwritten or in-class essays.
- Personalized prompts: connect content to students’ lives or experiences.
- Scaffolded tasks: proposal → outline → draft → final.
- Oral exams or presentations.
- Open-book, open-note assessments focused on application and analysis.
- Peer review: students critique each other’s work, making AI-generated content easier to detect.
- Authentic assessments: real-world tasks, portfolios, or multimedia projects.
- Class-integrated tasks: reference specific class discussions or activities.

Academic Integrity

- Promote a culture of integrity through ongoing dialogue.
- Educate students on the ethical implications of generative AI.
- Use plagiarism detection tools as one of many deterrents.
- Reinforce Universal Design for Learning (UDL) by offering varied formats such as video, audio, and graphic organizers.

AI-INCLUSIVE
Design Choices

Assignment Instructions

- Encourage students to use AI tools as collaborators or creative partners.
- Provide clear guidance on how AI can be used such as brainstorming, drafting, feedback.
- Require students to document and reflect on their AI interactions.

Assessment Criteria

- Evaluate how effectively students integrate AI into their process.
- Assess critical thinking in how students revise or build upon AI-generated content.
- Include creativity, originality, and ethical use of AI in the rubric.

Student Reflection

- Ask students to explain how AI helped shape their ideas or structure.
- Include prompts like: “What did AI suggest that you kept or changed, and why?”
- Encourage reflection on the strengths and limitations of AI as a learning partner.

Example Assignments

- Brainstorming with AI: Use AI to generate multiple perspectives or ideas.
- “Collaborate with an Alien”: Explain human concepts to a fictional outsider using AI-generated prompts.
- Scenario creation: Use AI to build future worlds, reimagine history, or visualize data.
- Draft generation: Use AI to create outlines or first drafts, then revise for voice, clarity, and structure.
- Error detection: Use AI to identify and improve grammar, logic, or clarity.
- AI as tutor: Ask AI for feedback or explanations, then reflect on its usefulness.
- Comparative analysis: Use AI to predict average responses and compare them to student ideas.
- Creative tools: Use AI to help design games, quizzes, or interactive learning tools.

Academic Integrity

- Define acceptable AI use and require attribution (e.g., “Assisted by ChatGPT, July 2025”).
- Promote ethical use through class discussions and modeling.
- Emphasize AI as a tool for learning, not replacement.