Course Syllabus

Course	Introduction to Generative AI
Semester	Summer and Winter
Class Format	Lectures and labs

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(AI-generated Image)

Course Description

This course introduces undergraduate students to generative artificial intelligence (AI), with an emphasis on practical tools and applications across text, image, and other emerging modalities.

Students will:

- Explore what generative AI is.
- Practice using generative AI tools for writing, communication and visualization.
- Develop effective strategies for interacting with AI tools.
- Examine opportunities and challenges of generative AI in different disciplines.
- Discuss ethical and responsible use of generative AI in professional settings.

Class sessions include a combination of lectures, discussions, class activities and projects.

Course Prerequisites

None

Course Rationale

Generative AI is transforming how people write, create, and solve problems. This course gives students an in-depth introduction to these tools and helps them develop practical skills for AI. The aim is to prepare students to engage with AI across different disciplines and use these tools effectively in a collaborative learning environment.

Course Materials

All required and supplementary materials will be provided by the instructor.

Learning Outcomes

Upon successful completion of this course, students will be able to:

- Explain what generative AI is and how it works at a high level.
- Use generative AI tools for text and image generation.
- Design effective prompts and interactions to collaborate productively with AI tools.
- Describe core ideas of machine learning and generative models.
- Discuss the potential and limitations of generative AI.
- Identify ethical, social and professional issues related to generative AI.
- Collaborate in small groups to design and present generative AI-based projects.

Email Policy

Emails will typically be replied to within 1-2 business days. Please note that emails may not be checked on weekends or holidays.

Grading and Evaluation Criteria

Grades are based on attendance and the completion of projects. The grading breakdown is as follows:

Weight	Item
20%	Attendance and participation
80%	Projects
100%	Class Total

Course Schedule

Weeks	Tasks
1	Introduction to Generative AI • Introductions, AI in everyday life • What is generative AI? • Generative AI for writing • Visual and multimedia applications with generative AI • Introduction to machine learning Prompting and Workflows with Generative AI Assistants • How generative models learn from examples • Prompt design basics • Improving AI responses • Generative AI workflows for productivity and creativity • Multimodal generative AI
2	Ethics and Responsibility for Generative AI Applications • Generative AI across disciplines • Ethics in the age of generative AI • Generative AI and academic integrity • Applications of generative AI • Concept design
3	Presentations and Next Steps • Group project presentations • Course reflection • Next steps and future learning with generative AI

Note: A course schedule is a guideline. The instructor reserves the right to modify modules, assignments, deadlines, or the schedule as necessary to meet course objectives.

Use of Artificial Intelligence (AI)

Generative AI is an important part of this course, and it can be a valuable tool to enhance your learning experience. Please keep the following in mind:

- You may use AI tools for class activities, brainstorming, and projects.
- Please acknowledge any AI assistance in your work.
- AI can suggest new ideas and directions that you might not have considered. However, since AI is not always accurate or reliable, it is important that you verify AI-generated content with credible sources.

UNLV Syllabus Policies

The UNLV Policies for all Students are available at https://www.unlv.edu/policies/students. You may also get to the policy webpage by scanning the QR code below:

Syllabus Changes

This syllabus is based on assumptions regarding the schedule, assignments, and expected workload. Details may change as the class progresses, and the schedule may shift slightly to accommodate resource availability. Any changes will be communicated in advance, along with updated tasks when appropriate.