

COURSE SYLLABUS
IST 314: Interacting with AI

1

Instructor: Dr. Jennifer Stromer-Galley

Term: Fall 2025

Office: Hinds Hall 210

Email: jstromer@syr.edu

Office Hours: M: 2:30 - 3:30; W: 11:30-12:30

Course Description:

This course helps students gain AI literacy. This course interweaves experiences working with a variety of AI tools, from text to art and voice to video, with critical interrogation of these AI tools, inviting students to consider the implications of AI use in a variety of contexts.

Additional Description:

None.

Prerequisite / Co-requisite:

None.

Audience:

Undergraduate students

Credits:

3 credits

Learning Objectives:

After taking this course, you will be able to:

1. Explain how AI tools and utilities work
2. Demonstrate effective use of a variety of AI tools
3. Critique the ethical, social, and cultural implications of AI tools

Shared Competencies:

This course fulfills 2 shared competencies:

- Information Literacy and Technological Agility (Midterm, Demonstration, Final Exam)
- Critical & Creative Thinking (Midterm, Demonstration, Final Exam)

Course Alignment with Learning Outcomes

This course aligns with the following learning outcomes:

Undergraduate Program:

P1: Identify and analyze the use of information, technologies, and data to solve problems in various contexts in the age of digital transformation.

Applied Data Analytics Program Learning Outcomes

AD2: Examine how individuals, organizations and society are created and impacted by data and machine learning models.

Innovation, Society, and Technology Program Learning Outcomes

IST1: Employ critical thinking skills in identifying, evaluating, and designing innovative practices in the age of digital transformation.

IST2: Examine and critique how individuals, organizations and society are created and impacted by data and information technology in the age of digital transformation.

Applied AI Minor:

- Identify and analyze potential ethical considerations in AI development and deployment
- Articulate the nuances of human-AI interaction to improve collaboration between humans and AI
- Critically evaluate AI applications and conceptualize potential future developments in the field

Required Readings:

Available at the bookstore (PURCHASE):

1. Mitchell, Melanie. (2019). *Artificial intelligence: A guide for thinking humans*. New York: Picador.
2. Meikle, Graham. (2023). *Deepfakes*. New York: Polity.

Available through the library/Blackboard course (FREE):

3. Dodhia, Rahul. (2024). *AI for social good*. New York: Wiley ([library link](#))

Additional readings (required and optional) will be available on Blackboard

AI Subscription Costs:

Students may be required to pay for subscriptions to advanced large language models and AI tools to complete assignments for the course. Costs for subscriptions range from \$25 to \$100, so students must plan accordingly to be able to pay for these costs to successfully complete the course.

Course Requirements and Expectations:

Students are not expected to have any knowledge of code, and we will not code in this class.

Estimate spending about 5 hours a week outside of class doing the readings, studying for the midterm and final, and doing the AI assignments. Reading is essential preparation for our class meeting time. They introduce you to concepts, arguments, and history, people and companies.

COURSE SYLLABUS
IST 314: Interacting with AI

6

Course Schedule

Date	Topic	Reading	Assignment
M: Aug. 25	Intro	Syllabus and Appendix	
W: Aug. 27	Roots of AI	Mitchell, C. 1 "The roots of artificial intelligence"	
M: Sept. 1	<i>No class</i>		
W: Sept. 3	Neural Networks	Mitchell, C. 2 "Neural networks and the ascent of machine learning"	In-class reading quizzes begin
M: Sept. 8	The Dream of AI	Mitchell, C. 3 "AI spring"	
W: Sept. 10	ConvNets	Michell, C. 4 "Who, what, where, when, why"	
M: Sept. 15	<i>No Meeting</i>	Anthropic's API Prompt Tutorial	
W: Sept. 17	NLP	Mitchell, C. 11 "Words and the company they keep?"	
F: Sept. 19			Text Gen 1
M: Sept. 22	Translation	Mitchell, C. 12 "Translation as encoding and decoding?"	
W: Sept. 24	QA	Mitchell, C. 13 "Ask me anything"	
F: Sept. 26			Text Gen 2
M: Sept. 29	ImageNet	Mitchell, C. 5 "ImageNet and Convnet"	
W: Oct. 1	"Learning"	Mitchell, C. 6 "A closer look at machines that learn"	
F: Oct 3			Image Gen 1
M: Oct. 6	Reinforcement	Mitchell, C. 8 "Rewards for robots"	
W: Oct. 8	Games	Mitchell, C. 9 "Game on"	
F: Oct. 10			Image Gen 2
M: Oct. 13	<i>No Class</i>		
W: Oct. 15			Midterm
M: Oct. 20	Digitizing sound	ElevenLabs "What is voice cloning"	
W: Oct. 22	Conversational AI	ElevenLabs "What is Conversational AI?"	
M: Oct. 27	Deepfakes	Meikle, C. 1, "What are deepfakes"	
W: Oct. 29	Porn	Meikle, C. 2, "Synthetic porn"	
F: Oct. 31			Sound Gen
M: Nov. 3	Remix culture	Meikle, C. 3, "Remix aesthetics"	
W: Nov. 5	Trust	Meikle, C. 4, "Manipulating trust"	
M: Nov. 9	Ethics	Dodhia, C. 5, "When good AI goes bad"	
W: Nov. 12	Regulation	Dodhia, C. 6, "Putting Safeguards Around AI"	
F: Nov. 14			Video Draft
M: Nov. 17	Environment	Zewe "Explained: Generative AI's environmental impact"	

COURSE SYLLABUS
IST 314: Interacting with AI

7

W: Nov. 19	Companionship	Ruiz "Everything you need to know about AI companions"	
M: Nov. 24	<i>No Class</i>		
W: Nov. 26	<i>No Class</i>		
M: Dec. 1	Humanity	Elon University Report "Technology experts worry about the future of being human in the AI age"	
W: Dec. 3 or F: Dec. 5 (TBD)	iSchool Poster/Demo		AI Project Demo & Submission
M: Dec. 8	Wrap up		
T: Dec. 16	10:15-12:15		Final Exam