

ARTG6460 - Human-Centered AI Syllabus

Instructor Information

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Course Description

In this course, we will explore the foundations of Human-Centered AI, a subdomain of artificial intelligence research that asks the core question underlying our study: How do we design AI technology in ways to augment and enhance human capability, rather than replace it outright?

We will begin by examining the history of research and technology around artificial intelligence, situating our current understanding of AI in a broader historical lens that will supply some of the motivations around why it matters to design AI with a human-centric orientation. From there, we will consider some of the key concepts, tenets, and challenges of Human-Centered AI, including topics such as transparency, accountability, and trust, along with how these ideas manifest in the space of interaction between humans and machines.

These ideas will then be examined in applied practice, exploring strategies for designing AI-driven platforms and services that align with a human-centric approach, evaluating and assessing the effectiveness of these approaches, and mitigating the potential risks and harms that arise when AI technology is deployed and used by humans.

Throughout, we will develop strategies for critically engaging with AI technology in ways that prioritize human values and well-being, consider the various stakeholders who are implicated in that technology, and leverage design thinking to see AI and humans as interactively co-constituted in their aims, rather than independent and separate.

Course Outcomes

This course provides you the opportunity to:

- Analyze the foundational principles of Human-Centered AI and its role in implementing AI.
- Apply a multidisciplinary approach to develop AI-driven products and services that prioritize human needs.

- Employ strategies for integrating human perspectives into the design, development, and deployment of AI systems.
- Assess the societal impacts of Human-Centered AI adoption and propose strategies for mitigating potential risks.
- Design and implement responsible AI solutions that are tailored to human needs.

Required Course Materials

There is no required textbook or other reading materials that need to be purchased. Resources will be linked within the lessons to which they correspond.

Course Structure and Activities

There are seven modules in a course and each module represents one week of learning. Assignments are generally due at the end of the week (Sundays) unless otherwise noted. Be sure to check the syllabus, your announcements, and/or assignment pages for exact due dates. Learners are encouraged to look ahead at the assignments in order to best prepare their time.

This course includes the following required activities:

- **Course Assessments:** There will be assessments that you complete during the course; specific instructions will be found in weekly modules.
- **Non-graded Learning Activities:** Throughout the course there will be opportunities for you to self-assess your learning to help you gauge your comprehension of core concepts and uncover any gaps. Even though this is not graded, it is a required component of this course.
- **Discussion:** These weekly submissions aim to provide you with an opportunity to reflect on your learning and to share your thoughts and experiences with the class in a professional community discussion space. This is a great venue to present your ideas or reflections for feedback and to elicit ideas from your peers.

Late Assignment Policy

Late Policy:

Students are responsible for submitting assignments by posted deadlines. Deductions will be automatically applied to late submissions based on the time elapsed after the

deadline:

- 1. 10% deduction within 24 hours**
 - 2. 25% deduction within 24-48 hours**
 - 3. 50% deduction within 48-72 hours**
 - 4. Zero credit if submitted more than 72 hours after the deadline**
- Exceptions to the late policy will be considered only in the event of an approved extension request.*

Extension Request Policy:

Students should only request an extension in the event of an emergency or other extenuating circumstance that impacts academic progress. To make an extension request, students should submit the extension request form and include a detailed explanation of the emergency or extenuating circumstance and how much additional time is being requested. When foreseeable, requests should occur before the assignment deadline. Requests received more than 24 hours after the deadline will not be considered. Extension requests will be considered by the faculty member on a case-by-case basis. If approved by the faculty member, it is at the discretion of the faculty member to determine the extended deadline and any associated penalties.

Extension Request Monitoring and Accountability:

The program team tracks and monitors all extension requests. Repeated requests for extensions across multiple courses may raise concerns regarding a student's overall academic progress and time management skills. Such patterns will be reviewed, and interventions may be implemented to provide support and address underlying issues.

Students are encouraged to manage their time effectively and seek help proactively to avoid frequent extension requests.

There are no exceptions or extensions for the final project/assignment deadlines in a course. They must be turned in by the deadline to receive a grade, due to the nature of the final grade entry deadlines enforced by Northeastern University.

Discussion Board Guidelines

This course incorporates discussion board assignments which provide opportunities to engage with your peers in discussions around weekly themes and topics.

When you post, think of a thesis and how best to support it. If you are the first to post, be sure to provide a careful analysis, strong (bold) argument (thesis), and open-ended questions that invite dialogue. Be sure to check back to see if anybody has responded to you. Does someone's comment make you think twice about your view? Help keep the conversation going and move the dialogue along. Introduce new ideas, but also build on what others have said.

When responding to others, look for posts that contradict or support your own thoughts, or posts that seem to fall short on an aspect that is important to you. In your response, you can also turn your own thoughts into questions, offer your position, or play the devil's advocate.

Class Schedule

Please note: For more information about specific assignments, see assignment pages in Canvas, and refer to the Course Summary below for exact due dates.

Activity	% of Grade	Due
Introduction or Academic Integrity Attestation	0%	Week 1
Check Your Knowledge Activities	0%	Week 1 - 7
Module assessments	70%	Weeks 1 - 7
Class Discussions	30%	Weeks 1 - 7

Grade Distribution

The following grading standards will be used in this class:

Grading Scale
A = 93%-100%
A- = 90%-92.9%
B+ = 87%-89.9%
B = 83%-86.9%
B- = 80%-82.9%
C = 73%-76.9%

C+= 77%-79.9%

C-= 70%-72.9%

F = Below 70%