

Course Description:

The world we are living in today is undertaking a tremendous change with the technological evolvments of internet speed (e.g., 5G network), computer vision, machine learning, and huge amount of aggregated data of human activities. Artificial intelligence, as the outcome of these technological evolvments, is transforming almost every industry, just like what electricity did 100 years ago.

In the world of advertising, the application of artificial intelligence has been seen and acted out from consumer analysis, to media buying, advertisement creation and real-time product recommendation. We are also seeing more application of artificial intelligence technologies in customer support and personal assistant across various digital devices, such as smartphone, in-home voice assistant and personal robotic agents.

In this course, we will be together, as an intellectual group, explore what is AI, how it's been applied in various stages and aspects of advertising, and discuss what kind of impact it would bring to the industry, to our professional career, to our personal life, and to our civic society. Most importantly, let's be creative in using artificial intelligent technologies to create better advertisement and consumer experiences, and do our best to prepare for the next decade of change and surf the waves of new AI evolutions, safely.



Course Learning Outcomes:

Students who complete this course successfully will possess:

- Fundamental understanding of what is artificial intelligence.
- The applications of artificial intelligence in advertising.
- Ability to understand the basic logics behind the execution of AI Advertising.
- Ability to create, present and implement advertisements using AI-empowered technologies.
- Critical thinking of the ethical issues related to the adoption of AI in advertising and the society.

Course Requirement:

Weekly Reflections & Forum Discussion (30 points)

For each lecture week (see details in the course calendar), students will be given several articles about a specific topic. Each student needs to post a reflection essay (about 100-150 words) on

the SAKAI discussion forum. In the reflection essay, students should express his/her opinion regarding the assigned readings and the lecture content. Students need to showcase logical reasoning and critical thinking in the writing. Moreover, each student should also reply to **at least one post** from peer classmates. This assignment is designed to foster peer discussion and encourage more intellectual collaborations among the students. This assignment is due **Friday Noon** each week, students should have everything posted by 12:00 p.m. Friday.

Human + Machine Collaboration (Group Projects) (50 points)

Students will work in a team of 4 or less members, based on preferred size and vibe of each group. In the beginning of the semester, each group of students select a brand to work on. And the chosen brand will be the one for the team to work on the entire semester.

There is a total of 2 human-machine collaboration projects.

Project #1: AI-assisted Advertising Campaign (25 points)

Project #2: AI-empowered Consumer Experience Rule-based (25 points)

Detailed requirements for each of the group projects will be given in class. All group members are expected to contribute equally to the projects, in terms of time, effort, work quality and collaboration. A problematic member may be asked to leave the group and complete the projects individually. It is the group's responsibility to inform the instructor promptly of any problem in the group.

*Late submission of the group projects will not be excused unless there is documented emergency that meets the school policy.

FINAL EXAM FOR UNDERGRADUATE (20 points) & GRADUATE (10 points)

There is a final exam towards the end of the semester. The final exam will cover all the lecture content. It will count differently for undergraduate and graduate students. Details of the final exam study guide will be provided a week prior to the final exam date.

FINAL ESSAY FOR GRADUATE STUDENT

For graduate students, there is an additional assignment due to the learning outcomes and requirement differences. Each graduate student needs to pick a topic of their interest and write an additional research essay about it. The essay should include sections: 1) Introduction; 2) Method; 3) Findings; and 4) Conclusion and Practical Implications. Each graduate student is strongly encouraged to arrange one-on-one meetings with the instructor to set up the writing plan ahead.

Course Assessment:

Assignment Weights (Undergraduate)

Intellectual Reflections & Forum Discussion	30 points
Group Project 1	25 points
Group Project 2	25 points
Final Exam	20 points (10 points for graduate students)
[Graduate Level Essay]	[10 points]
Total	100 points

Grading

A 93-100	C+ 77-79
A- 90-92	C 73-76
B+ 87-89	C- 70-72
B 83-86	D+ 67-69
B- 80-82	D 64-66
	F below 64

Course Weekly Content Calendar (subject to change)

	CONTENT
Week 1: Introduction (Jan.17 th ~ Jan. 20 th)	Course Overview Group Formation & Expectations
Week 2: General Knowledge about AI (Jan.23 rd ~ Jan. 27 th)	What is AI? Advertising Knowledge & Evolvement
Week 3: AI in Consumer Insights (Jan. 30 th ~ Feb. 3 rd)	AI in Consumer Insights
Week 4: AI in Media Planning (Feb. 6 th ~ Feb. 10 th)	AI in Media Buying and Recommender System
Week 5: AI in Ad Creative (Feb. 13 th ~ Feb. 17 th)	AI in Ad Creative (Release of Project #1)
Week 6: Project 1 Execution Week (Feb.20 th ~ Feb. 24 th)	Group Meeting with Jing
Week 7: Project 1 Presentation Week (Feb. 27 th ~ March 3 rd)	Group Presentation #1
Week 8: Spring Break	No Content
Week 9: Chatbot Design I (Mar.13 th ~ Mar. 17 th)	Chatbot Persona Design (Release of Project #2)
Week 10: Chatbot Design II (Mar. 20 th ~ Mar. 24 th)	Chatbot Function Block Design
Week 11: Chatbot Design III (Mar.27 th ~ Mar.31 st)	Chatbot Design _Demo
Week 12: Voice Assistant Chatbot (Apr.3 rd ~ Apr.7 th)	Voice Assistant Chatbot Design
Week 13: Project #2 Execution Week (Apr.10 th ~ Apr.14 th)	Group Meeting with Jing
Week 14: Project #2 Presentation Week (Apr.24 th ~ Apr.28 th)	Group Presentation #2
Week 15: Final Exam (May 1 st ~ May.5 th)	Final Exam

APPENDIX

School of Communication Statement on Academic Integrity

A basic mission of a university is to search for and to communicate truth as it is honestly perceived. A genuine learning community cannot exist unless this demanding standard is a fundamental tenet of the intellectual life of the community. Students of Loyola University Chicago are expected to know, to respect, and to practice this standard of personal honesty.

Academic dishonesty can take several forms, including, but not limited to cheating, plagiarism, copying another student's work, and submitting false documents.

Academic cheating is a serious act that violates academic integrity. Cheating includes, but is not limited to, such acts as:

- Obtaining, distributing, or communicating examination materials prior to the scheduled examination without the consent of the teacher;
- Providing information to another student during an examination;
- Obtaining information from another student or any other person during an examination;
- Using any material or equipment during an examination without consent of the instructor, or in a manner which is not authorized by the instructor;
- Attempting to change answers after the examination has been submitted;
- Unauthorized collaboration, or the use in whole or part of another student's work, on homework, lab reports, programming assignments, and any other course work which is completed outside of the classroom;
- Falsifying medical or other documents to petition for excused absences or extensions of deadlines; or
- Any other action that, by omission or commission, compromises the integrity of the academic evaluation process.

Plagiarism is a serious violation of the standards of academic honesty. Plagiarism is the appropriation of ideas, language, work, or intellectual property of another, either by intent or by negligence, without sufficient public acknowledgement and appropriate citation that the material is not one's own. It is true that every thought probably has been influenced to some degree by the thoughts and actions of others. Such influences can be thought of as affecting the ways we see things and express all thoughts. Plagiarism, however, involves the taking and use of specific words and ideas of others without proper acknowledgement of the sources, and includes, but is not limited to, the following:

- Submitting as one's own material copied from a published source, such as Internet, print, CD-ROM, audio, video, etc.;
- Submitting as one's own another person's unpublished work or examination material;
- Allowing another or paying another to write or research a paper for one's own benefit; or
- Purchasing, acquiring, and using for course credit a pre-written paper.

The above list is in no way intended to be exhaustive. Students should be guided by the principle that it is of utmost importance to give proper recognition to all sources. To do so is both an act of personal, professional courtesy and of intellectual honesty. Any failure to do so, whether by intent or by neglect, whether by omission or commission, is an act of plagiarism. A more detailed description of this issue can be found at <http://luc.edu/english/writing.shtml#source>.

In addition, a student may not submit the same paper or other work for credit in two or more classes. A student who submits the same work for credit in two or more classes will be judged guilty of academic dishonesty, and will be subject to sanctions described below. This applies even if the student is enrolled in the classes during different semesters. If a student plans to submit work with similar or overlapping content for credit in two or more classes, the student should consult with all instructors prior to submission of the work to make certain that such submission will not violate this standard.

Plagiarism or any other act of academic dishonesty will result minimally in the instructor's assigning the grade of "F" for the assignment or examination. The instructor may impose a more severe sanction, including a grade of "F" in the course. All instances of academic dishonesty must be reported by the instructor to the appropriate area head and to the office of the Dean of the School of Communication.

The office of the Dean of the School of Communication may constitute a hearing board to consider the imposition of sanctions in addition to those imposed by the instructor, including a recommendation of expulsion, depending on the seriousness of the misconduct. In the case of multiple instances of academic dishonesty, the Dean's office may convene a separate hearing board to review these instances. The student has the right to appeal the decision of the hearing board to the Dean of SOC. If the student is not a member of the SOC, the dean of the college in which the student is enrolled shall be part of the process. Students have the right to appeal the decision of any hearing board and the deans of the two schools will review the appeal together. Their decision is final in all cases except expulsion. The sanction of expulsion for academic dishonesty may be imposed only by the Provost upon recommendation of the dean or deans. 7

Students have a right to appeal any finding of academic dishonesty against them. The procedure for such an appeal can be found at:

http://www.luc.edu/academics/catalog/undergrad/reg_academicgrievance.shtml.

The School of Communication maintains a permanent record of all instances of academic dishonesty. The information in that record is confidential. However, students may be asked to sign a waiver which releases that student's record of dishonesty as a part of the student's application to a graduate or professional school, to a potential employer, to a bar association, or to similar organizations.

(The School of Communication policy is based entirely on and is consistent with the Academic Integrity Policy of the College of Arts & Sciences.)

Technology (Info Provided by LUC)

This course will require the use of technology. While students are not expected to own any specific technology for this course, they will be required to use technology to access course content, to complete and submit assignments and to communicate with the instructor and other students outside of designated class times.

The University has provided each student with a Loyola network ID to access institutional resources. It is expected that electronic communication with students will be via the Loyola ID and Loyola's email system, which can be accessed at: <https://outlook.luc.edu/>.

Your Loyola ID and password is your main resource for accessing Loyola systems. The Password Self-Service systems allows students, faculty, and staff on the University network to reset their own network password quickly and independently. Go to: <http://www.luc.edu/its/services/password-self-service.shtml> to learn more and to manage your password.

Course materials will be provided via the Sakai learning management system, which can be accessed at: <https://sakai.luc.edu/>. It is expected that students will access and submit assignments and other coursework via the Sakai system using their Loyola ID and password.

This course may include online activities such as live (synchronous) or outside of designated class time (asynchronous) activities. For online synchronous activities the instructor may require the use of computers with webcams and microphones. For these types of activities, it is expected that students have access to and setup the necessary equipment prior to the online class. To learn more about technology support for online course activities go to:

<http://www.luc.edu/online/resources/technology/>.

Digital Media Services (DMS) manages and maintains a number of multimedia and digital media computer labs and services across the Lake Shore and Water Tower campuses. Students can visit the labs to checkout various technologies, receive consultation, and access various types of training for coursework. More information on hours of operation can be found at: <http://www.luc.edu/digitalmedia/>.

While the instructor will provide access to certain technologies and course materials within the Sakai learning management system, students may require additional technology support. The Information Technology Services (ITS) Help Desk provides general technology support. Please note that while the ITS Help Desk provides extended hours of support, it is not a 24-hour service. To learn more about Help Desk services and the hours of operation please go to:

<http://www.luc.edu/its/helpdesk/>.