**WIS5078: User Experience and Artificial Intelligence**

Joo-Wha Hong

[j.hong@skku.edu](mailto:j.hong@skku.edu)

Office Hours: Thursday 14:00-15:30 / By Appointment (Location: Faculty Hall 40417)

**Time:** Tuesday 15:00-17:45

**Location:** Undecided

***I. Course description***

In this course, students will engage in practical activities focused on conducting research in human-AI interaction and writing a research paper. The goal is to guide students in crafting a paper centered on public perceptions and assessments of artificial intelligence, intended for submission to international conferences or journals. The class offers a conceptual grasp of artificial intelligence and theoretical frameworks applicable to social science research on human-AI interaction. Furthermore, individual mentoring will be available to support each team's research project.

***II. Learning Objectives***

Expected learning outcomes for students are listed below.

* *Conceptualization of AI:* 
  + Understand the terms frequently used to describe artificial intelligence, essential for AI researchers.
  + Familiarize yourself with social science theoretical frameworks explaining human-AI interaction.
* *Analytical Thinking:* 
  + Develop theoretically grounded improvements in the field of human-AI interaction.
  + Apply AI knowledge to design a research idea that is both feasible and executable for the student's preference.
* *Information Literacy:*
* Conduct academic research using various library resources.
* Develop the ability to communicate effectively across disciplines to achieve team goals.

***III. Assignments & Assessments***

**Application Assignments (30%)**

A central goal of this course is to help you strengthen your ability to apply human-AI interaction knowledge to real-world scenarios and tasks. Completing weekly application assignments is one way to help develop this skill. Throughout the course of the semester, you will complete weekly application assignments. You will complete a total of **10 application assignments**. These assignments will take two forms:

* *Popular press:* Locate an example from the popular press that relates to the week’s topics and readings. Describe your example and discuss how it relates to the week’s materials.
* *Academic article:* You will locate an academic article that ties in with the week’s topic. In your assignment, you will summarize the article and describe how it connects with the week’s topics and assigned readings.

This assignment is about the **application,** so it is not a summary practice. At most, you should spend a paragraph summarizing ideas. The bulk of your assignment should be devoted to analysis of the example or article and application of course concepts. Your assignment should demonstrate that you are critically engaging with the material and providing your own take on it. Length should be more than 500 words but not exceed 1,000 words. You must include references to course materials and any outside materials you cite (APA format). If you are not familiar with APA format, please check this site (<https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html>). You must also include two discussion questions for the class. References and discussion questions are not included in the word count.

Note: Your assignment is due by **11:59 PM a day before class** in order to ensure that I have time to read your assignment. Submissions submitted after this time will be counted as late. Submissions more than 24 hours late will not be accepted.

You should come to class prepared to discuss your assignment. A few people will be selected each week to present in class, so you must be prepared. Lack of preparation for application assignment discussions will impact your course participation grade.

**Midterm Paper & Presentation (20%)**

The midterm project for this course is a group effort and consists of developing a proposal for new research that involves human-AI interaction. For the midterm paper, students must submit an 8-page extended abstract that focuses on the research question, literature review, and research method. Also, students will give 10-minute presentations about their midterm paper (and turn in a copy of their PPT).

**Final Paper** **& Presentation (40%)**

The final project for this course is also a group effort and consists of writing a full research article. The final deliverable consists of a written report along with a presentation in the final class period. Students must turn in a 15-page final paper without reference pages. The final paper should make ample use of the readings assigned for the class as well as outside sources. The final paper is expected to be well-written, and free from awkward phrasing and grammatical errors. It should flow well and be convincing. Only papers that are rigorously researched, meticulously written, and creatively argued will be awarded an “A” grade. Again, students will give 10-minute presentations about their final paper (and turn in a copy of their PowerPoint slides).

**Attendance & Participation (10%)**

You should plan to be present for the entirety of all class periods. If you become ill or circumstances arise making it impossible for you to attend class, please contact me by email before the absence. Also, students are expected to actively engage in discussions. Missing class, arriving late, not participating, and leaving early adversely affect the participation grade.

***IV. Grading Breakdown***

|  |  |
| --- | --- |
| **Assignment** | **% of Grade** |
| Applicant Assignments | 30 |
| Midterm Presentation | 10 |
| Midterm Paper | 10 |
| Final Presentation | 15 |
| Final Paper | 25 |
| Attendance & Participation | 10 |
| **TOTAL** | 100 |

***V. Assignment Submission & Late Policy***

Application assignments must also be emailed to me at [j.hong@skku.edu](mailto:j.hong@skku.edu).

**If you are unable to turn in an assignment due to illness or a personal emergency, you must provide written documentation that will allow you to be excused or discuss your situation with me in a timely manner. Do not wait until the end of the semester to sort things out.**

In order to pass this class, you will need to complete ALL of the assignments.

Late work is not accepted. All assignments must be completed and submitted to the instructor before the time at which they are due. Students are encouraged to submit assignments before this deadline. Because all homework is assigned well in advance of deadlines, no exceptions to the late work policy will be granted due to technological problems. Be prepared for these problems to arise and don’t wait until the last minute.

All assignments should be turned in as Word documents. Other file formats (e.g., pages, .wps) are not accepted. Files that are uploaded in a format that is not .doc or .docx will not be evaluated and will receive a score of zero.

***VI. Required Readings and Supplementary Materials***

**Textbooks**

1. **Zero to AI** - Gianluca Mauro & Nicolò Valigi (Publisher: Manning Publications, ISBN: 1617296066)
2. **The Sage Handbook of Human-Machine Communication** - Andrea L. Guzman, Rhonda McEwen, & Steve Jones (Publisher: SAGE Publications Ltd. ISBN: 152977392X)

Each week you will be reading some combination of book chapters, journal articles, and popular press articles. All journal articles will be posted on i-campus.

***VII. Course Schedule: A Weekly Breakdown***

***Important note:*** *Be advised that this syllabus is subject to change – and probably will change – based on the progress of the class and/or guest speaker availability.*

*Refer to i-campus for Weekly Assigned Readings.*

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Topics** | **Readings** | **Deliverables** |
| Week 1 | Course Introduction |  | Prepare a 1-2 minute introduction for the first day of class |
| Week 2 | Definition of AI (1) | Zero to AI: Ch 1-3 |  |
| Week 3 | Definition of AI (2) | Zero to AI: Ch 4-6 |  |
| Week 4 | AI UX Research Topics; Research Paper Writing; Publication Process | [Hong](http://dmitriwilliams.com/wp-content/uploads/2020/11/SexistAI2020.pdf)[a](http://dmitriwilliams.com/wp-content/uploads/2020/11/SexistAI2020.pdf) [(2020)](http://dmitriwilliams.com/wp-content/uploads/2020/11/SexistAI2020.pdf); [Hong](https://journals.sagepub.com/doi/abs/10.1177/1461444820925798)[b](https://journals.sagepub.com/doi/abs/10.1177/1461444820925798) [(2020)](https://journals.sagepub.com/doi/abs/10.1177/1461444820925798); [Hong](http://dmitriwilliams.com/wp-content/uploads/2021/08/Hong-2021-Ai-you-can-drive-my-car-how-we-eval.pdf)[c](http://dmitriwilliams.com/wp-content/uploads/2021/08/Hong-2021-Ai-you-can-drive-my-car-how-we-eval.pdf) [(2021)](http://dmitriwilliams.com/wp-content/uploads/2021/08/Hong-2021-Ai-you-can-drive-my-car-how-we-eval.pdf); [Kim & Song (2021)](https://www.sciencedirect.com/science/article/pii/S0736585321000344?casa_token=hiHGIHDqa-gAAAAA:NEZ8WUwgEeMjxDebCyWnbEWgThnrGkw8w4nO0qD8NWOkAHIKDHprBucXVphAEbMxf4EVEbX-bH0) | Team Assignment; Research Topic Selection |
| Week 5 | Research Methodologies; Measuring User Experience | [Hong](https://journals.sagepub.com/doi/abs/10.1177/08944393231167211)[d](https://journals.sagepub.com/doi/abs/10.1177/08944393231167211) [(2023)](https://journals.sagepub.com/doi/abs/10.1177/08944393231167211); [Bartneck et al. (2009)](https://www.bartneck.de/publications/2009/measurementInstrumentsRobots/); Handbook of HMC: Ch 20, 21, 26, 27 |  |
| Week 6 | CASA, Anthropomorphism, and Uncanny Valley | [Nass et al. (1994)](https://dl.acm.org/doi/pdf/10.1145/191666.191703); [Ho & MacDorman (2017)](https://link.springer.com/article/10.1007/s12369-016-0380-9); [Xu (2019)](https://journals.sagepub.com/doi/full/10.1177/1461444819851479?casa_token=cPwSLNueJjIAAAAA:XgSo18fX96hOLYX94H6fCZhoXRQaSrVNJkHip3RFYbAZ7xQ4fsiwUVM7SGi66doxtM1CWlmxQ3XaZg); [Sack & Röcker (2014)](https://vwhci.avestia.com/2014/PDF/004.pdf) |  |
| Week 7 | MAIN & Machine Heuristics & Affordance | [Sundar & Kim (2019)](https://dl.acm.org/doi/abs/10.1145/3290605.3300768?casa_token=E3L7n53jTy4AAAAA:KknqioZAaDKxuQaq3w6QL3ratqYqNQA0ioQ_wric8TKwcEnFfDZSWJxYDGiJZBOJ0soJ0abZ663LxA); [Sundar (2020)](https://academic.oup.com/jcmc/article/25/1/74/5700811); [Sundar (2008)](https://betterlegalinfo.ca/wp-content/uploads/2019/12/Sundar-paper.pdf); Handbook of HMC: Ch 7 |  |
| Week 8 | Midterm Presentations | - |  |
| Week 9 | Social Presence, Theory of Mind | [Čaić et al. (2020)](https://link.springer.com/article/10.1007/s12369-018-0507-2); [Lee et al. (2021)](https://www.sciencedirect.com/science/article/pii/S1071581921000264?casa_token=zk8bSeRToaoAAAAA:MtrOLIWQ2jSjRgJdoJDXf7veeIGO8cdaw7pGlQDefkWfp3QQwfR-_TB292vVYtsBjmnh7lEJbu4); [Mou et al. (2020)](https://ieeexplore.ieee.org/abstract/document/9223551?casa_token=I9mkvwBG3J8AAAAA:nThv1S0SzkdFQ3x-nqEkkOqINgFj3CzgxuCOu-V4X-0P4IPLUGFm2sj-FdL7qB06IWHCbmgmyg); Handbook of HMC: Ch 10, 30 |  |
| Week 10 | Factors Influencing  AI Evaluation | [Hong](https://ijoc.org/index.php/ijoc/article/view/17728)[e](https://ijoc.org/index.php/ijoc/article/view/17728) [(2022)](https://ijoc.org/index.php/ijoc/article/view/17728); [Wang & Chuang (2023)](https://link.springer.com/article/10.1007/s10639-023-12015-w); [Ito (2010)](https://www.wired.com/story/ideas-joi-ito-robot-overlords/); [Lee & Rich (2021)](https://dl.acm.org/doi/pdf/10.1145/3411764.3445570) |  |
| Week 11 | TAM & Diffusion of Innovation | [Davis (1989)](https://www.jstor.org/stable/249008?origin=crossref); [Vorm & Combs (2022)](https://www.tandfonline.com/doi/abs/10.1080/10447318.2022.2070107?casa_token=10VBRNd-jzAAAAAA:0oB0IjY5HDgWk5z9YsCbv7D1vUJ-131JtMlBZjH57IdpjCpAUi23tzUMRq348c88pLGht9P9gRVDgg); [Xu et al. (2023)](https://journals.sagepub.com/doi/full/10.1177/00936502231191832?casa_token=nzHdGV9XvQEAAAAA:cirS2FS0Y5noheRsfQCfrjjoaDhp4IchWSFLfDuLPEAYGKdtybUULSMYsUO_JpURR3BfOd9V1gm-nw); [Dearing (2021)](https://search.informit.org/doi/pdf/10.3316/INFORMIT.099978856207819) |  |
| Week 12 | Hedonic vs. Utilitarian Values; Warmth & Competence; Trust | [Christoforakos et al. (2021)](https://www.frontiersin.org/articles/10.3389/frobt.2021.640444/full); [Yanit et al (2023)](https://www.sciencedirect.com/science/article/pii/S0747563223002212); [Seun & Hung (2023)](https://www.sciencedirect.com/science/article/pii/S074756322300064X); [Harris-Watson et al. (2023)](https://www.sciencedirect.com/science/article/pii/S0747563223001164) |  |
| Week 13 | Actor-network theory. Social Roles, & STS | [Gutiérrez (2023)](https://link.springer.com/article/10.1007/s43681-023-00314-4); [Wu et al. (2023)](https://www.sciencedirect.com/science/article/pii/S0148296323005933?casa_token=Hm1hUjepMH0AAAAA:HLI5ufBvaL9gq2o79McQTq-ke7yIKHaMdd3ow6ZZGtGtUbPvrvCkAKxbe23TY7IUJFhuidZ1WTs); [Knibbs (2023)](https://www.wired.com/story/ai-art-copyright-matthew-allen/) |  |
| Week 14 | Turing test and AI dilemmas | [Kekatos (2023)](https://abcnews.go.com/US/turing-test-determines-computers/story?id=101486628); [Saba (2020)](https://medium.com/ontologik/understanding-the-chinese-room-argument-and-semantics-b5584a456274); [Harisk (2023)](https://medium.com/@harisk1353/the-trolley-problem-ai-revived-this-moral-dilemma-6d9407735796); [Zhang et al. (2022)](https://www.sciencedirect.com/science/article/abs/pii/S0022103122000464) |  |
| Week 15 | Final preparation week | - |  |
| Final Project | Final presentations | - | Final Paper due 000 by 11:59 PM; Final Presentation |

***VIII.* Policies and Procedures**

**Communication**

I reply to my emails within 48 hours (although on the weekends I may take longer). If you don’t hear back from me promptly, feel free to send me a follow-up after two days have gone by. And please make sure to include “[UX & AI]” in the title of email.

**Respectful conversation**

We may touch on topics that some students feel sensitive about during class. If you find yourself having an emotional response, please reach out to me. Know that I want everyone to feel comfortable engaging in productive, open conversation, including at the times we don’t agree with one another. If I get something wrong, I’d like to hear from you in a respectful way; I have an open mind and like most people, I am still learning and evolving.

I also hope you’ll be mindful that we all come to the classroom from a variety of backgrounds and life experiences. We can’t truly understand another person’s perspective, but we can listen with acceptance and empathy.

**Statement on Academic Conduct and Support Systems**

**a. Academic Conduct**

Students are expected to comply with university policies dealing with student misconduct. Any evidence of cheating, plagiarism, or misrepresentation of work will result in a failing grade on the assignment. Additionally, any evidence of academic misconduct will be immediately reported to the College.

*Plagiarism*

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *[Plagiarism.org](https://www.plagiarism.org/).* Other forms of academic dishonesty are equally unacceptable.

**b. Support Systems**

*SKKU Counseling and Mental Health – (02)760-1290 / [counskku@skku.edu](mailto:counskku@skku.edu)*

(KOR) <https://scc.skku.edu/scc/online/online.do>

(ENG) <https://scc.skku.edu/scc/foreign/greetings_EN.do>

(CHN) <https://scc.skku.edu/scc/foreign/greetings_CN.do>

Free and confidential mental health treatment for students.

*National Suicide Prevention Lifeline - 109 – 24/7 on call*

<https://www.129.go.kr/109>

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

*SKKU Human Rights Center - (02) 760-1299/ [helper@skku.edu](mailto:helper@skku.edu)*

<https://helper.skku.edu/helper/index.do>

If it is difficult for you to visit the Human Rights Center in person for consultation, you can receive counseling through online consultation. If you send us the content you want counseling for via email, you can receive more detailed counseling. The identity and content of the counseling will be kept strictly confidential, and the response will be sent by a professional counselor.

*SKKU Center for Disability Services and Programs - (02) 760-1092*

[supporter@skku.edu](mailto:supporter@skku.edu)

Support and accommodations for students with disabilities. Services include assistance in providing assistive technology and support for individual needs.

If you need special accommodations in order to meet any of the requirements of this course, please contact me as soon as possible.