Syllabus
MMM3113E Interdisciplinary perspectives on AI
Prof. Dr. Nadine Lindstädt-Dreusicke and Prof. Dr. Dirk Wentzel
Summer Semester 2024

Level	Bachelor	
Credits	3	
Student Contact Hours	2	
Workload	30 hours within class and 60 hours for self-study and for preparing the group assignment	
Prerequisites	Completed first study section	
Time	Regularly: Tuesday, 15:30-17:00 and 17:15-18:45 Additional dates due to the Easter holidays and the blocking for the presentation dates: Tuesday, 30.04. 08:00-09:30 (room W1.2.02_T), Tuesday, 30.04. 09:45-11:15 (room W1.2.02_T)	
Room	W1.5.03, on 09:04.2024 room W3.2.02	
Start Date	19.03.2024 (fast track course, the course ends on 30.04.2024)	
Lecturers	**Names**	Prof. Dr. Nadine Lindstädt-Dreusicke and Prof. Dr. Dirk Wentzel
	Office	W2.4.03 (Lindstädt-Dreusicke), W4.1.05 (Wentzel)
	Virtual Office	Lindstädt-Dreusicke: Internet Office Media Management und Werbepsychologie Wentzel: available via Zoom appointment
	Office Hours	Lindstädt-Dreusicke: please see on Moodle also for booking appointments: Anmeldung Kolloquium Wentzel: Monday, 12.00 – 1.30 pm
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Summary

AI is everywhere and AI is here to stay! Thus, it is necessary to analyze this phenomenon and its highly dynamic developments more thoroughly. The elective "Interdisciplinary perspectives on AI" is a joint teaching course by Prof. Dr. Dirk Wentzel and Prof. Dr. Nadine Lindstädt-Dreusicke and analyses the potentials and challenges that Artificial Intelligence offers for different participants and players on the market (e.g. companies, users, politics, etc.). After an introduction on the relevant terms, definitions, classifications and tools on AI, the course will deal with the general potential that AI provides for the overall economy and society. Following, we will then dive deeper into the application of AI in specific market segments such as marketing, communication, media and ecommerce. In equal measure, the course will also critically assess and discuss the challenges and risks that AI brings (e.g. fake news, deep fakes, copyright issues, ethical concerns and so on) as well as suitable remedies. The assessment of this course is a group presentation by the students that as well covers different areas, angles and perspectives on AI (e.g. virtual influencer, AI and ecommerce, AI and social media, AI and sustainability, etc.) Additionally, the course will be complemented by guest lectures from the industry.

Outline of the Course

    I.   Introduction on AI and its economic impact
   II.   On the potentials of AI for different fields of the economy
           (e.g. marketing & communication, media and ecommerce)
  III.   Challenges and risks of AI and the need for regulation
  IV.   Getting into practice: on some relevant AI tools – trying, introducing and evaluating
   V.   Guest lectures from the industry with different perspectives
  VI.   Student presentations

Course Intended Learning Outcomes and their Contribution to Program Intended Learning Outcomes / Program Goals

Program Intended Learning Outcomes	Course Intended Learning Outcomes	Assessment Methods		
After completion of the program the students will be able…	After completion of the course the students will be able…	Presentation	Presentation	Participation in Class
		40%	40%	20%
		Collective	Individual	Individual
1 **Expert Knowledge**				
1.5 …to demonstrate profound expert knowledge in their field of specialization.	…to demonstrate profound expert knowledge in the field of Artificial Intelligence from different angles and perspectives as a promising tool for different businesses and the overall economy. In the same way the students demonstrate profound expert knowledge on the risks and challenges of AI and have an understanding on possible remedies.	x	x	x
2 **Digital Skills**				
2.2 …to effectively use and apply information systems to develop solutions in business settings.	…to use different information systems as well as suitable AI tools in a goal-oriented manner in order have a practical understanding of the benefits of such tools as well as for elaborating on their class assignment. In the same way the students will be able to critically assess what AI tools can provide and where the limits are, making adjustment necessary.	x		
2.3 …to effectively use digital technologies to interact, to collaborate and to communicate.	…to use collaborative tools in order to enable interaction, collaboration and communication within the team in order to prepare and complete the group assignment.	x		
3 **Critical Thinking and Analytical Competence**				
3.2 …to critically reflect and interpret findings and to develop comprehensive solutions for complex problems.	…based on differentiated analyses and critical reflection, to assess the status quo of the dynamic AI setting and its different subfields as well as the relevant benefits and possible risks and challenges of AI to make a proper judgement for use.	x	x	x
4 **Ethical Awareness**				
…to develop sound strategies in the areas of ethics, sustainable development and social responsibility and are able to apply them to typical economic decision-making problems.	…have a sound understanding on the ethical concerns and problems of AI. The students are furthermore able to critically assess the use of Artificial Intelligence for different purposes and different fields in the business context and find solutions to overcome ethical concerns.	x		x
5 **Communication and Collaboration Skills**				
5.2 …to demonstrate their oral communication skills in presentations.	…to present, explain and communicate their interdisciplinary AI knowledge in a structured and comprehensible manner, both throughout their group presentations as well as during the discussion in class.		x	x
5.3 …to work successfully in a team by performing practical tasks.	…to successfully work in a team while preparing and presenting their group assignment (presentation) and smaller assignments throughout the course.	x		
6 **Internationalization**				
6.2 …to articulate themselves in a professional manner in international business.	…to deal with the AI market and corresponding expert terms and vocabulary in English and articulate themselves in a professional manner in the area of the international AI environment and business.		x	x

Teaching and Learning Approach

- The course is organized as a seminar. In the first weeks of the semester, the two professors will give an introduction on the subject – always approaching from different angles and perspectives.
- With this input, students in according teams, will have to elaborate a specific presentation topic on AI that will be presented at the end of the course.
- A coaching session is included in order to monitor the students' progress on elaborating their presentation topic and to give feedback and recommendations on how to proceed.
- Additionally, the course will be complemented by guest lectures from the industry in order to highlight the huge relevance of the topic for businesses.
- Over the entire course, discussions will accompany the introductory period, the guest lectures as well as the presentation topics.

(Background) Literature and Course Materials

Please be aware that this (background) literature list is fairly extensive in order to account for the interdisciplinary focus of the course, i.e. the different angles and perspectives one needs to look at when coping with AI.

The students are not expected to work through all of the literature, however, can decide to further research on a specific perspective with these broad literature recommendations!

Emphasis on selected literature will be put in the actual lectures and the corresponding lecture slides that will be presented on Moodle.

- Agrawal, Ajay, Joshua S Gans, and Avi Goldfarb. "What to Expect From Artificial Intelligence." *MIT SLOAN MANAGEMENT REVIEW*, n.d.
- American Civil Liberties Union. "Why Amazon's Automated Hiring Tool Discriminated Against Women | ACLU," October 12, 2018. URL: https://wp.api.aclu.org/news/womens-rights/why-amazons-automated-hiring-tool-discriminated-against
- Baek, T.H. (2023). Digital Advertising in the Age of Generative AI. Journal of Current Issues & Research in Advertising, 44(3): 249-251. https://doi.org/10.1080/10641734.2023.2243496
- Bostrom, Nick. "Ethical Issues in Advanced Artificial Intelligence." In *Machine Ethics and Robot Ethics*, by Wendell Wallach and Peter Asaro (ed.), 69–75. 1st ed. Routledge, 2020. https://doi.org/10.4324/9781003074991-7
- Brynjolfsson, Erik, and Andrew Mcafee. "ARTIFICIAL INTELLIGENCE, FOR REAL." *Harvard Business Review*, July 2017, 31.
- Budzinski, O.; Gaenssle, S. & Lindstädt-Dreusicke, N. (2022). Data (r)evolution: the economics of algorithmic search and recommender services. In Sabine Baumann (Ed.), Handbook of Digital Business Ecosystems: Strategies, Platforms, Technologies, Governance and Societal Challenges (pp. 349-366). Edward Elgar Cheltenham.
- Cremer, David De, and Garry Kasparov. "AI Should Augment Human Intelligence, Not Replace It." *Harvard Business Review*, March 18, 2021. URL: https://hbr.org/2021/03/ai-should-augment-human-intelligence-not-replace-it
- Davenport, T.; Guha, A.; Grewal, D.; Bressgott, T. (2020). How artificial intelligence will change the future of marketing. Journal of the Academy of Marketing Science (2020). 48:24-42. https://doi.org/10.1007/s11747-019-00696-0

- De Silva, Daswin, and Damminda Alahakoon. "An Artificial Intelligence Life Cycle: From Conception to Production." *Patterns* 3, no. 6 (June 10, 2022): 100489. https://doi.org/10.1016/j.patter.2022.100489.
- DK London: Simply Artificial Intelligence, Penguin Random House, 2023.
- Khanzode, Ku Chhaya A. "Advantages and Disadvantages of Artificial Intelligence: A Literature Review," n.d
- Korteling, J. E. (Hans)., G. C. van de Boer-Visschedijk, R. A. M. Blankendaal, R. C. Boonekamp, and A. R. Eikelboom. "Human- versus Artificial Intelligence." *Frontiers in Artificial Intelligence* 4 (2021). https://www.frontiersin.org/articles/10.3389/frai.2021.622364
- Kshetri, N.; Dwivedi, Y.K.; Davenport, T.H.; Panteli, N. (2024). Generative artificial intelligence in marketing: Applications, opportunities, challenges, and research agenda. International Journal of Information Management 75(2024), 102716. https://doi.org/10.1016/j.ijinfomgt.2023.102716
- McKinsey & Company (2023). The economic potential of generative AI, June 2023. URL: https://www.mckinsey.de/~/media/mckinsey/locations/europe%20and%20middle%20east/deutschland/news/presse/2023/2023-06-14%20mgi%20genai%20report%2023/the-economic-potential-of-generative-ai-the-next-productivity-frontier-vf.pdf
- Newman, N. (2024). Journalism, Media, and Technology Trends and Predictions 2024, Digital News Project, January 2024. URL: https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2024-01/Newman%20-%20Trends%20and%20Predictions%202024%20FINAL.pdf
- Prawitz, Dag. "Tacit Knowlege — An Impediment for AI?" In *Artifical Intelligence, Culture and Language: On Education and Work*, edited by Bo Göranzon and Magnus Florin, 57–59. The Springer Series on Artificial Intelligence and Society. London: Springer, 1990. https://doi.org/10.1007/978-1-4471-1729-2_7.
- Roitblat, Herbert L.: Algorithms are not enough. Creating General Artificial Intelligence, MIT Press, Cambridge Massachusetts, 2020.
- Russell, Stuart J., and Peter Norvig. *Artificial Intelligence: A Modern Approach*. Fourth edition. Pearson Series in Artificial Intelligence. Hoboken: Pearson, 2021.
- Song, Mengmeng, Xinyu Xing, Yucong Duan, Jason Cohen, and Jian Mou. "Will Artificial Intelligence Replace Human Customer Service? The Impact of Communication Quality and Privacy Risks on Adoption Intention." *Journal of Retailing and Consumer Services* 66 (May 1, 2022): 102900. https://doi.org/10.1016/j.jretconser.2021.102900.
- The White House. "The Impact of Artificial Intelligence on the Future of Workforces in the European Union and the United States of America | CEA," December 5, 2022. URL: https://www.whitehouse.gov/cea/written-materials/2022/12/05/the-impact-of-artificial-intelligence/
- Trattner, C.; Jannach, D.; Motta, E., Meijer, I.C., Diakopolous, N.; Mehdi, E., Opdahl, A.L., Tessem, B.; Borch, N.; Fjeld, M.; Ovrelid, L.; De Smedt, K.; Moe, H. (2022). Responsible media technology and AI: challenges and research directions. AI and Ethics (2022) 2:585-594. https://doi.org/10.1007/s43681-021-00126-4
- Upadhyay, Malay A., Artificial Intelligence for Managers. Leverage the Power of AI to Transform Organizations and Reshape your Career, 2020.
- WAN-IFRA (2023). Gauging Generative AI's impact on newsrooms. Survey: Newsroom executives share their experience so far. WAN-IFRA and Schickler.

Assessment

The assessment of the course will be based on three parts:

1. the students' **presentations (<u>individual</u> assessment: 40%)**
2. the students' **presentations (<u>collective</u> assessment: 40%)**
3. **participation in class (<u>individual</u> assessment: 20%)**

Each part of the course assessment has to be passed with a grade of at least 4.0 or better!

<u>Course Attendance</u>

Please be aware that for this course the attendance is compulsory. It is only allowed to miss one session in this course!

Code of Conduct for online Teaching

[Link to the Code of Conduct for online Teaching](#)