Exchange programme Vrije Universiteit

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit - 2022-2023

Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please visit the exchange programmes webpages.

AI & Society: Fixing Algorithmic Decision Making

Course Code	S_AIS
Credits	6.00
Period	P5
Course Level	300
Language Of Tuition	English
Faculty	Faculteit der Sociale Wetenschappen
Course Coordinator	dr. A. Casas Salleras
Examiner	dr. A. Casas Salleras
Teaching Staff	dr. A. Casas Salleras, dr. L. Aaldering, prof. dr. W.H. van Atteveldt, dr. Y. Eski, G.M. Quaedvlieg
Teaching method(s)	Study Group, Partial Exam, Lecture

Course Objective

Upon completion of this course, the student is able to ...
• understand the basics of how algorithmic and AI decision making works;
• recognise, from many theoretical perspectives (e.g. political, sociological, ethical), the advantages and the problems solved by algorithmic/AI solutions;
• critically think, from many theoretical perspectives, about the downsides of algorithmic/AI solutions;
• creatively think about ways of addressing existing downsides;
• design and implement a solution to a societal problem emerged from an algorithmic/AI solution;
• work and cooperate with people from other disciplines;
• present academic work in English.

Course Content

Algorithms are playing an increasingly important role in our society and the relationships between people, organisations, and governments and politics. The explosion of information and ease of digital transactions means that consumers, marketeers, and politicians rely on algorithms to find the most relevant product, customer, or voter. It also means that citizens more often interact with digital platforms when talking to their peers, consuming the news, and taking part in politics.
These developments have given a great boost to our economy and made everyday life vastly easier, but they also come with downsides. Our privacy is being eroded by data mining, decisions about limiting freedom of speech online are becoming less transparent, inequality and stereotypes are exacerbated by algorithmic biases and political discourse is increasingly polarised by trolls, fake news, and selective exposure.
This course aims to help students understand algorithms and their biases and impact on society from a multidisciplinary perspective.

Additional Information Teaching Methods

The course has a theoretical and an applied component. A set of lectures spread throughout the period will help students build a theoretical understanding of algorithms, from a technical, organisational, societal, and individual perspective; focusing on the promises but also the pitfalls of algorithmic decision making. In addition, in small group projects, students will work on addressing one of the discussed pitfalls and fixing the AI. For this active learning component, we will partner with organisations that use AI and algorithmic decision making, such as media organisations using news recommender systems, large social media companies, and a consultancy firm specialised in online marketing.

We'll meet three times a week. During the first meeting we will have lectures that will follow the flipped-classroom model. Students will be assigned to read required literature and post questions on Canvas about the literature ahead of the meeting. Then, during the meeting the students and the instructor/s will discuss the key takeaways form the readings in more detail. In this way, more teaching time is available for answering questions, deepening the knowledge and testing the learning outcomes. A different team/s will present one of the assigned readings, and the remaining groups will post questions about the readings on Canvas ahead of time.
During the second meeting of the week we will use "Applied learning". "Applied learning" is based on the idea that students can learn from connecting what they read and discuss in the classroom, with the outside world. These meetings are organised around a series of guest lectures with outside speakers who are practitioners that use AI technologies in their day-to-day life in order to solve problems in different industries. Then, students use the insights they learn from these real-world experiences to identify a problem generated by the application of an AI solution and then design a solution that could be implemented in the real world. They get to ask questions to these practitioners. The goal of these lectures is to inform the kinds of AI-emerged challenges out there, and potential solutions to these challenges, and so to better prepare students for their final assignment.
Finally, during the last meeting of the week you will work in groups on your final assignment. The instructor will help the groups clarifying questions and providing feedback on their progress. You will work in a randomly formed team of about five students in the final assignment, as well as during the work group meetings. To enhance cooperation, by the end of the course the students are asked to evaluate their team members. Low evaluations by your team members can lead to lower grades for the assignment.

Method of Assessment

1. Class participation, group grade (20%)
• 10% literature presentation: at the beginning of the first lecture of each week, each group presents once throughout the course.
• 10% questions posted on Canvas
2. Mid-term Exam, individual grade (40%)
3. Final Assignment, group grade (40%)
• 20% Assignment Part I: Problem definition: Students work on identifying a specific problem that emerges in a specific setting from implementing an algorithmic/AI solution.
• 20% Assignment Part II: Designing a solution: Students work on designing a solution and implementation plan to tackle the defined problem.
The grades from each part (Participation, Mid-term Exam, and Final Assignment) need to be sufficient (55% or above) in order to pass the course.

Additional Information Target Audience

2nd year bachelor students Faculty of Social Sciences.
Exchange students.

Custom Course Registration

It is only possible to take one of the courses "AI and Society," "The Human Dimension of Sustainable Development" or "Improving Planetary Health".

In this course, you cannot enroll for one of the study groups yourself,

but you will be assigned by the course coordinator. The allocation will

be announced via Canvas. Please note: You do have to register for the course and the other course components on VU.nl.