

Course information:

- Lectures: IBD, 1:30p-4:30p, on September 12, 19, 26; October 3, 10, 15, 17, 31, 2024
- Office hours: Tuesdays, 5:00p-6:00p (online)
- Professor: Romain Ferrali [romain.ferrali@univ-amu.fr]

This syllabus is subject to change at the discretion of the professor

1. Course description

This course provides an introduction to a fast-growing, new field of research, the economics of social networks, both from a theoretical and an empirical perspective. We first discuss how to describe networks, then move on to questions of network formation, and finally analyze questions of behavior on networks.

2. Course material

Lecture notes will be posted after each lecture on Ametice. We will be using the following textbook, loosely.

- Jackson, Matthew O. 2008. *Social and Economic Networks*. Princeton University Press.

The following references may also prove useful.

- Mark Newman. 2018. *Networks*. Oxford University Press.
- Bramoullé, Yann; Galeotti, Andrea; Rogers, Brian (eds.). *The Oxford Handbook of the Economics of Networks*. Oxford University Press.
- Watts, Duncan. 2004. *Six Degrees: The Science of a Connected Age*. W. W. Norton & Company.

3. Tentative schedule

Week	Theme	Content	References
1	Describing networks	Theory	MJ2
2		Empirics	MJ13
3	Network formation	Theory	MJ6, 11
4		Empirics	
5	Behavior on networks	Theory (1) - Diffusion	MJ7
6		Theory (2) - Network games	MJ9
7		Theory (3) - Learning	MJ8
8		Empirics	

4. Learning outcomes

Upon completion of the course, students should be able to:

- Describe networks formally
- Understand the broad families of questions in the field of network economics
- Solve a series of standard, theoretical network models
- Understand a series of common challenges that arise when making statistical inferences on networks, and know a series of techniques to circumvent those challenges

5. Assignments and grades

This course is evaluated through a final exam (2/3 of the final grade) and an essay (1/3 of the final grade). The final written exam will last 2 hours.

The essay is due on October 31, 2024. In this essay, students must discuss one recent academic article related to networks. The essay should be structured in three parts and should be no longer than 5 pages. In the first part, students should briefly summarize, in their own words, the analysis of the paper. In a second part, students should criticize the analysis, as they would do if they had to review the paper for an academic journal. In a third part, they should provide a detailed proposition of future research, building on the paper's analysis.

Students should choose their article as soon as possible. Their choice must be approved by the Professor.

6. Academic integrity

It is expected that students be aware of and respect the academic integrity norms as defined by Aix-Marseille Université. The « Charte relative à la lutte contre le plagiat de l'Université d'Aix-Marseille » (TX-DFD-40, <https://procedures.univ-amu.fr/dfd/tx-dfd-40-charte-relative-a-lutte-contre-plagiat>) reminds the University's commitment to the principles of academic integrity.

Alleged cases of fraud or plagiarism will be handled as per the PR-DAJI-101 procedure; « Section disciplinaire usagers », <https://procedures.univ-amu.fr/daji/pr-daji-101-section-disciplinaire-usagers>.

7. Student accessibility

The University is an open, universal environment that celebrates equality in rights and opportunities. As a public institution, its mission is to encourage everyone's insertion and success. The question of accessibility is integral to those values. Aix-Marseille Université is deeply committed to the question of accessibility.

In order to benefit from accommodations for your studies and/or exams, please contact your campus's disability office as soon as possible.

For further information, please refer to <https://www.univ-amu.fr/fr/public/mission-handicap-amu>