

# Economics of Networks

Module 4, 2023-2024

**Shahir Safi**  
New Economic School  
ssafi@nes.ru

## Course information

---

**Course Website:** TBD

**Instructor's Office Hours:** TBD

**Class Time:** TBD

**Room Number:** TBD

**TA:** TBD

## Course description

---

- We live in a connected society, and these connections can have a huge impact on our lives. With the rise of social media (Facebook, Twitter, etc), it has become clear that social networks can influence what we know, what we buy, and how we vote. However, connections (or networks) have always been influential to our lives. For instance, it is common knowledge that personal connections (Social Networks) matter in finding jobs. Similarly, the financial crisis of 2007-2008 was driven by connections between banks (Financial Networks). And finally, the global economy depends on trading connections/relationships between countries (Trade Networks).
- This course provides an introduction to the Economics of Networks. We will consider how network structures impact behavior, which network structures are likely to emerge in a society, and the overall influence of various networks on economic and social outcomes.

## Course requirements, grading, and attendance policies

---

- Course prerequisites include Micro 4 and Game Theory.
- Course grade will be based on problem sets (40%) and Final Exam (60%).
- There will be four problem sets, and each problem set is worth 10% of the final grade.

## Course contents

---

Topic 1: Introduction to Networks

- Basic Measurements – neighborhoods, and clustering.

- Advanced Measurements - centrality, and influence.

Topic 2: Network Formation

- Strategic Network Formation
- Tension between Efficiency and Stability

Topic 3: Games Played on Networks

- Peer Effects
- Public Goods

Topic 4: Markets and Networks

- Networked Market: Labor Market and Referrals
- Buyer-Seller Networks

## **Course materials**

---

### **Required textbooks and materials**

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

### **Additional materials**

- Goyal, Sanjeev. 2009. *Connections: An Introduction to the Economics of Networks*. Princeton: Princeton University Press.

## **Academic integrity policy**

---

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.