

General Information

- **Instructor:** Amr El Abbadi
- Office: 3115 Engineering I
- Office hours: MW 11:00–12:00pm
- **Teaching Assistant:** Sudipto Das
- Office hours: TBA

Format

In this class I will be presenting some of the fundamental topics that form the basis of research in Distributed Systems and Computing. The topics we will cover are in no way exhaustive, and of course, they reflect my own subjective biases and some of my current interests. I will not be using a textbook. However, you will be expected to read several papers, which I will either handout or post a pointer to from the class website. I expect you all to read the papers that I discuss in class. I plan to have 3 to 4 in-class 1 hour quizzes. These will be announced a week in advance and will basically ensure that you are all following the material as we progress. I expect to also hand out 1 or 2 homework/programming projects to further explore some of the basic ideas discussed in class. In addition, we will have 2 paper critiques. The list of papers will be announced in class, and students can form teams of 2.

Supplementary Textbooks

- Distributed Operating Systems and Algorithms by Chow and Johnson, Addison-Wesley, Reading, MA (1997).
- Distributed Systems: Concepts and Design by Coulouris, Dollimore and Kindberg, Addison Wesley 2005.

Policies and Quizzes

The course grade will be based on the quizzes and homework/programming assignments. Requests for quiz and homework regrades must be submitted within 1 week of their return. Finally, grades will be approximately allocated as follows: quizzes: 45%, project: 40% and paper critique: 15%.

A Sampling of the Topics Covered

1. Time and Global States
2. Coordination, Mutual Exclusion and Agreement
3. Fault-Tolerance
4. Peer-to Peer Systems
5. Combining Information from Multiple Sources
6. Misc state of the art papers.