Contact Info

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Office Hours  MT 1:30-3pm
              F 1:30-2:30pm

Overview

CSCI 365 is a course on advanced algorithms. The four main topics are bioinformatics algorithms, advanced algorithms techniques (linear programming, randomized algorithms, online algorithms, and approximation algorithms), computational economics, and social and information networks.

Course Materials and Website

There is no required textbook for the class, but there are a lot of readings. Our primary resources are the following, which are on reserve at Mudd library. All required reading will either be handed out in class, or posted on the course website.

- *An Introduction to Bioinformatics Algorithms*, by Jones and Pevzner
- *Algorithm Design*, by Kleinberg and Tardos
- *Algorithmic Game Theory*, edited by Noam Nisan

The readings, as well as handouts and announcements will be posted on the course webpage at [www.cs.oberlin.edu/~asharp/cs365/](http://www.cs.oberlin.edu/~asharp/cs365/).

Course Requirements & Expectations

**Four** group homework — expect to spend at least 8-10 hours on each.

**Four** solo homework — expect shorter versions of homework, to be completed alone.

**One** final project — expect to write an in-depth report on a subject of your choosing, and to present a summary to the class.

**Daily** attendance and participation — expect to be in class.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Group Homework Assignments</td>
<td>50%</td>
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<tr>
<td>Solo Homework Assignments</td>
<td>25%</td>
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<tr>
<td>Final Project</td>
<td>15%</td>
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<tr>
<td>Attendance, Participation &amp; Promptness</td>
<td>10%</td>
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Homework Policy

- Homework is due at the beginning of class on the specified date. Late homework is accepted within 24 hours of its deadline for half credit. After 24 hours no credit is given. The first late assignment (up to 24 hours) per student incurs no penalty.
- You must hand in hard copies of you assignments (emailed solutions are not accepted).
- Hand in one solution set per group (on the group homework).

Honor Code

I take the honor code very seriously, and will report any violations to the Honor Code Committee.

This is a class where working with your peers is not only allowed, it is encouraged. For the group homework, you may discuss ideas with your classmates. Your group should hand in one submission, which should represent a group effort on each question. For the solo homework, the only person you may discuss your solutions with is Alexa.

For both the group and solo homework, you may use the internet and other references to look up definitions and background material, but not to look up answers to the problem in question. You must cite any resources you use.

If you do work with a friend or friends, please write your cohorts names on the top of your assignment. This is important, and I certainly think no less of you if you work with your classmates. Finally, you must write the honor code on every assignment, along with your signature. You know the drill by now. For the record, the honor code is

“I affirm that I have adhered to the Honor Code in this assignment.”

Student Disabilities

If you require special accomodation, please speak to me during the first week of class so that I have time to make suitable arrangements. You must be registered the office of Student Disabilities.