Algorithms: Introduction

Introduction to POGIL and CSCI 382

Welcome to CSCI 382, Algorithms! This semester we will often use a methodology called POGIL (Process-Oriented Guided Inquiry Learning). Before we jump into learning about algorithms, we'll take a bit of time to learn about how POGIL works. (We will leave the question of *why* we are using POGIL until next time.) You'll also explore the syllabus of CSCI 382 so you know what to expect this semester.

You should be in a group of three or four people. If not, either you are trying to do this activity on your own (don't even think about it!) or something has gone terribly wrong. You should also have something to write with handy.

1 If not everyone on your team knows each other already, begin by introducing yourselves.

Each member of a POGIL learning team has a specific **role**, although the roles will change from day to day. Figure out which member of your team has most recently had a birthday. That person will be the **manager** for today. The other members of your team, in alphabetical order by first name, will be the **recorder**, the **reporter**, and the **reflector**, respectively. If your team only has three members, one person should take the roles of both reporter and reflector.

- 2 Figure out which team member has each role for today, and write down the roles.
- 3 The **manager** should go ask for **role cards** from your instructor and distribute them appropriately. Take two minutes to read over the role card(s) corresponding to your role(s).
- 4 Each team member should take **one minute** to explain the important aspects of their role(s) to the rest of the team.

https://www.pogil.org

Learning objective: I can list and explain the roles in a POGIL classroom.

Learning objective: I can explain course policies for weekly problem sets, grading, exams, and academic integrity.

Model 1: CSCI 382 Syllabus

Using a phone, laptop, or other suitable device, visit the CSCI 382 course web page at the following URL (you will most likely want to bookmark it!):

https://hendrix-cs.github.io/csci382/

Say whether each statement below is true or false. If false, explain what a correct version of the statement would be.

Remember that you should work together to come up with responses to the questions. Make sure all team members agree before moving on.

- 5 Problem sets are typically due Friday at 4pm, and should be submitted electronically.
- 6 Problem sets can be submitted as either .pdf or .docx files.
- 7 One week, Amanda has a play performance, three midterm exams, a 100-page paper due, and a family trip. As a result, she is not able to finish her Algorithms problem set before the deadline. She must either turn in whatever she has by the deadline, or else get a zero on the assignment.
- 8 Problem sets are graded out of 100 points.
- 9 If you decide that you want to get a B in CSCI 382, Dr. Yorgey will be disappointed.



- 10 Attendance is not part of your grade. However, if you will be absent, you should let Dr. Yorgey know ahead of time.
- 11 In this course, which of the following could be considered academic integrity violations?
 - (a) collaborating with another student on a weekly problem set
 - (b) collaborating with another student to write up solutions to a weekly problem set
 - (c) looking at another student's code
 - (d) referring to an online resource
 - (e) referring to an online resource without citing it
 - (f) collaborating with another student while preparing for the final exam
 - (g) obtaining a copy of exam questions before an exam
 - (h) using generative AI to write solutions to exam questions

Hint: in addition to the syllabus, be sure to also look at http://ozark.hendrix.edu/~yorgey/ ac-integrity-policy.html (which is also linked from the syllabus).

Facilitation plan

Learning Objectives

Content objectives

- I can list and explain the roles in a POGIL classroom.
- I can explain course policies for weekly problem sets, grading, exams, and academic integrity.

Process objectives

Intro & getting started (5m)

Introduction to POGIL (10m)

CSCI 382 Syllabus (10m + 5m discussion)

Make chart of last Q on board (ac integrity), have reporters fill it in, discuss. This will probably take a while.