

Lab 1: Breaking The Ice

Overview: This is a one-hour long, team-based lab done in the style of “Computer Science Unplugged” exercises. This particular lab is designed with bioinformatics in mind.

Teams: The lab is performed in teams of 5-6 people: three CSC 448 and two-three BIO 441 students. The teams are *ad-hoc* and *temporary*: these are **NOT** the eventual permanent teams.

Game: You will play a simple game, in which each member of the team will play an assigned role. There are special roles for BIO 441 students and different special roles for CSC 448 students. You will play three rounds of the game. This way, each CSC 448 student gets to take on each of the roles in the game.

Start of the game: Once formed, each team is given a large envelope, containing the game accessories. Inside the envelope are three smaller yellow envelopes (or packets) for CS students and two white envelopes/packets for BIO students. There are other items in the envelope – their purpose will become clear once the game starts.

Role Assignment: Before starting Round 1 of the game, each CSC 448 student selects one of the yellow envelopes and opens it. Inside, is the description of the role that the student will play in Round 1, and the accessories that will help fulfill the role. After each round, rotate the roles by passing the contents of the envelope/packet (instruction card, role name tag and any other accessories) to the next person who will play the role. **Please, preserve the contents of the envelopes as well as you can – we will try to reuse them in future coursework.**

Goal of the game: BIO 441 students will receive some data and a specific goal that they have to achieve with the help of CSC 448 students. In Round 1 you do not need to know what BIO 441 students are trying to achieve. Your task is to respond to their inquiries, performing the actions you are asked to do according to the instructions given to you. (After Round 1, the overall goal of the game will become clear).

Communication: In Round 1, please refrain from any attempts to help BIO 441 students, in ways, **not indicated** on your instruction card. Let them figure out how to achieve their goals.

Gameplay: On each round, two BIO 441 students will lead the game by attempting to achieve their goal. They will do so by asking you to perform the task matching your role in the game, and giving you the data. You need to perform the task, produce any new data (output) and pass it back as specified in the instructions. When BIO 441 students believe that they have achieved the task, the round ends.