

ECE 110 – Team Collaboration

Human-Centered Design Module #1

Purpose

The purpose of this document is to facilitate discussion to assist in the creation of your team contract. Use the questions and prompts in this module to develop a better understanding of your teammates and decide on how you can best collaborate this semester.

Pre-Lab

You should have completed the prelab for Week 2 exercise “*Working in Teams*” on Tuckman’s theory of group formation.

During Lab

Complete the below sections as a group during lab time. Assign one person to record your answers in this document.

Part 1 - Ice Breaker

To get the conversation started, this activity will push you to find common ground with your group members. The activity will be conducted in 3 rounds, each one getting more specific, but lowering the minimum number of items to find in common.

Round 1 - General facts

For this round, any information about yourself will do - where you’re from, how many siblings you have, what pet(s) you have - whatever it is, it just has to be shared across your whole team!

Discover at least 3 general facts you all have in common and list them below.

- 1. Engineering majors**
- 2. Everyone prefers cold**
- 3. We rather take physics than chemistry**

Round 2 - Activities you enjoy

Next, we'll go a little bit deeper - discuss with your team some of the things you enjoy doing and see where you're similar. As you're listening to your group members, don't be afraid to (respectfully) ask "Why do you enjoy that?" and other such follow-up questions when they mention a hobby or interest that surprises you; remember, the outcome of this activity is to list out at least 4 activities you all enjoy, but the goal is to get to know each other along the way!

- 1. Gaming**
- 2. Sports**
- 3. Reading**
- 4. Chess**

Round 3 - Your motivations for engineering

For this last round, we want you to discuss the reasons each of you chose a major in engineering. Since this is a little more in-depth and nuanced, we recommend you go around one at a time and give each person a chance to share their motivations. Once every group member has shared, discuss as a group to see if there were any trends or themes across all of your answers; if there were (even if they end up being really general because your motivations are all so different), write them out below! Aim for at least 2 of these trends or themes, if possible.

- 1. Understanding the reason why things happen**
- 2. Passion for math**

Part 2 – Discussion of Prior Team Experiences

Once you've completed the ice-breaker activity, it's time to move on to a discussion of prior team experiences. Your prior experiences, good or bad, may bias your expectations for this semester. Let's explore them!

Identify 3-5 positive group experiences that were shared by two or more of your ECE 110 teammates.

1. Effective communication

2. Effort from all members

3. Respect for opinions

Unfortunately, things don't always go well. Identify 3-5 negative group experiences that were shared by two or more of your ECE 110 teammates.

1. Lack of interest

2. Refusal to do work

3. Lack of group structure

Part 3 - Personal Strengths

Although you and your team may still be learning about yourselves and what you're good at, a preliminary discussion of perceived strengths will help you begin to understand each other better.

What are the strengths of each of your team members? One at a time, ask your team members the following questions and identify between 2 and 4 distinct "strengths" for each team member.

1. ***What do think you're best at when collaborating with a group?***
2. ***What unique experiences or skills do you have?***

Strengths can include anything related to technical skills (building electronics, coding, testing/evaluation, etc.) OR non-technical skills (communication, time management, conflict resolution, etc.); it's also totally OK if a strength is shared among two or more team members!

Name	Strengths
Edward Ruan	I have skills in soldering and circuit design, testing/evaluation. I'll communicate in a timely manner and also check up on everyone now and then.
Desmond Liu	I show up if there's no time conflict.
Xuanyu Zhou	I learn.
Pedro Borges	I try to deliver work on time and communicate clearly. I am able to keep an open mind.

Part 4 – Team Roles

You can assign each group member a “role” for what they should be responsible for throughout the semester based on their strengths.

Assigning roles can be tricky, especially in a group where your skills and experiences are already quite similar. Examples of roles for your ECE 110 lab group could include:

- **“The Scribe” - the team member that takes notes and/or records responses to questions during group sessions**
- **“The Timekeeper” - the team member that watches the clock and keeps the team on course**
- **“The Brakeman” - the team member that “applies the brakes” when the rush to finish is sacrificing the learning objectives**
- **“The Scheduler” - the team member that is responsible for ensuring the team has a meeting time outside of lab hours and that contact is made when such a meeting needs to occur**

Name	Team Role
Edward Ruan	The Brakeman
Desmond Liu	Scheduler
Xuanyu Zhou	The Scribe
Pedro Borges	Timekeeper

Comment on which roles may be permanently assigned and which roles might rotate through the team.

We will help each other and rotate through different roles as we see fit. Roles are not permanent.

Post-Lab

Have every team submit this document (Team Collaboration) to GradeScope. Each contributing member's name should appear.

Submit your complete-and-signed Team Contract to GradeScope. Again, each contributing member's name should appear.

Grading also will take into account that instructions were followed properly and that all sections are thoughtfully completed.

The team contract will be also assessed based on how well it will enable your team to fulfill these 5 criteria (this is what we call a "rubric"):

- Will the charter foster equal contribution to the teams work from all members**
- Will the charter foster positive interactions between teammates**
- Will the charter keep the team and individuals on track**
- Will the charter encourage quality work from the team and individuals**
- Will the charter foster the development of skills and abilities necessary to succeed in ECE 110**

GradeScope's written submissions must be PDF's and in portrait orientation.

Submit your individual video to GradeScope as an *.mp4.