COGS 300 Group Policies

This course involves a significant amount of group work. You will be interacting with people in a group for the entirety of the course, both in labs and lectures. Typically, we like to construct a group such that there are a variety of skills present in the group membership, not just technical skills. A group should have the following strengths represented in at least one person (most people have all of these skills to some degree):

1. **Organization and leadership skills**. Someone who can guide a group. A good leader sets schedules, chairs meetings, encourages collaboration, reminds people of duties, and keeps an eye on the high-level and long-term goals. Need to be highly-organized people.
2. **Physical design and making skills**. Someone who is good at making things. Generally knows how the physical world interacts with a procedure to achieve a goal. Engineers can fit this description, but often makers are craftspeople, artists, cooks, and so forth.
3. **Analysis and computation skills**. Someone who can use math and logic for problem-solving. Generally knows how to code and use computers, can analyze a situation in terms of causal factors, able to break down a problem in terms of small achievable parts.
4. **Writing and communication skills**. Someone who can communicate an idea. Has an accurate awareness of what other people might think, sensitive to emotions and meaning. Confident in expressing through words, or sometimes photos and videos.

At the beginning of the term, all students will fill out a survey indicating their confidence in the above skills from 1-5, and we will match students in the same lab section to balance teams with these skills.

Group Work Agreements

Interdisciplinary collaboration is at the core of the study of Cognitive Systems. However, the expectations and training in different fields sometimes makes for differing expectations. According to UBC policy, as a 4-credit course, you should plan to spend **a <u>minimum</u> of 15 hours a week** working on COGS 300, including in-class time. The purpose of this is not to be prescriptive and legalistic, but to facilitate you having a clear discussion at the beginning of term.

Each person needs to make a personal schedule (not handed in), then work out your group schedule and work plan. See the appendix for an example. The group **must** negotiate and all agree to written plan that covers the following bases:

- **Weekly meeting and work schedule**. When and how will you meet and work together? Everyone should agree to a minimum of a weekly in-person meeting outside of class, likely to be held in the lab, but you may schedule more frequent meetings. You should not expect to only be meeting during weekly labs.

- **Communication policy**. How will you communicate? At a minimum, you are required to respond to group members via email within one business day, but you may agree to different communication channels, times, or frequencies of communication. For example, some people have group chats, or some people keep strict business hours and do not respond after 5pm. Ensure that everyone agrees to a reasonable schedule of communication.
- **Realistic grade and effort discussion**. Although everyone should be shooting at least for a "B," some people prefer to shoot for high grades, which will require extra work. Ensure that everyone is aware of each other's effort expectations.
- **Roles and responsibilities**. Sometimes, giving people explicit job titles is a helpful way to ensure that everyone knows what the expectations are. However, the course policy is that *all members are responsible* for achieving group objectives. So, even if someone decides that their job is to be the "robot builder," they cannot decide to not contribute to writing, and nor should they be left to be the only person working on the robot. Roles indicate primary responsibility, not sole responsibility.
- **Feedback, respect and conflict resolution**. You need to come up with a plan for dealing with conflict, giving each other feedback, and ensuring respect. It *will* happen: have a realistic discussion about this—don't idealize and plan to "fail". How do you expect to give each other feedback in a way that preserves the safety and effectiveness of the group?

Group Conflict Negotiation Policy

Most groups get along in COGS 300 because people find building the robot to be challenging but fun. However, in rare cases, group members may come into conflict: someone might not contribute as much as they were hoping they could, personalities clash, expectations may be unclear, etc. COGS 300 has the following policies to deal with situations where the group dynamic has broken down to an unreasonable degree:

1. **Inform people of your expectations**. There should be an honest effort to communicate expectations within the group. If you believe that someone is not meeting expectations, you have a responsibility to communicate with them first.
2. **Inform people of consequences**. If you have communicated your expectations, you should let people know what the consequences of not meeting those expectations will be. Note that *consequences* are not (and should never be) *punishments*. There are natural consequences to not meeting expectations, i.e., you will talk to the TAs/instructor, or you will not want to work with someone anymore.
3. **Inform TAs/instructor**. If informing of expectations and consequences fails, or even if you need support in the first two items, then you should inform the TAs and/or the instructor of the situation. We will handle it in a direct, fair, and gentle manner. For example, nobody will be "in trouble" for not getting along with their group unless they have been abusive. We will simply

intervene to see if there is a mutually agreed upon solution, or break up the group at our discretion.

In cases where a group must be dissolved in some manner, **each sub-group or individual group member will be fully responsible for completing the assignments on their own**. If you cannot get along with a group, regardless of how "fair" or "unfair" you feel the situation is, if you are removed from a group, you will have to complete the rest of the work on your own.

In my years of teaching, this extreme of a situation has never happened in COGS 300, but it often happens in larger classes. My stance is clear: **when one person is taking credit for work that they did not do, this is a form of academic dishonesty. I can, have, and will pursue an official investigation, citation on your academic record, and assign zero for the assignment**. Let's make sure it doesn't get to that point. Usually, I can work things out.

Appendix: Example of a Work Agreement

Group Name: Data Ducks

Members:

- Brady S, 92287903
- Zoe W, 44730943
- Rebecca M, 22574735
- Wakana K, 30735468

Schedule:

- Weekly in-person meeting Wednesday after lab 3pm in IONA B151
- Weekly lab on Wednesdays at 1pm in IONA B151
- Weekly Discord checkin Fridays at 3pm

Communications:

- Emails responded to within 1 business day
- Check and respond to group chat once per day
    - If due dates are come up then check group chat multiple times a day
- Google docs
- Github link: https://github.com/wakana-k98/cogs-300-robot

Effort expectations:

- We all plan to achieve an "A" or above in the class
- We will spend a minimum of 5 hours a week on lab work

Roles:

- Wakana: group leader, organizer, note-taker
- Zoe: lead writer, editor
- Rebecca: lead robot maker, designer
- Brady: tech lead, coder

Feedback:

- We will use the "standup" method (https://geekbot.com/blog/daily-standup-meeting) on Wednesday meetings to inform each other of what we're working on and what we need for success.
- We will give each other feedback using the "compliment sandwich" method, i.e. two good things for every bad thing.
- We will use non-violent communication (https://www.cnvc.org/) to try to come to consensus on difficult issues for the most part.
- However, if consensus is impossible, we will revert to Robert's Rules (https://www.boardeffect.com/blog/roberts-rules-of-order-cheat-sheet) and abide by a majority vote. As Leader, Wakana's decision breaks ties.
- Each Wednesday, we will use the "postmortem" method to reflect on what worked well about working together that week, what didn't work well, and what we will improve.

Signed: Wakana, Zoe, Rebecca, Brady

Appendix: Paul's personal group work methods

Postmortem method: You explicitly meet for a critique session, looking both at the product and the process of working together that week. *Everyone is required* to say one thing that worked well, and one thing that did not work well. This develops a habit of saying both "good" and "bad" things, either of which can be scary or seem impossible for some people.

Topic-detail brainstorm: You have a pre-brainstorm where you brainstorm on the topics of conversation, organize the topics, and *avoid getting into the details*. Then, someone volunteers to be the facilitator and guides the group from topic to topic. This develops a habit of separating the meta-discussion from the detailed discussion.

Secret bad ideas: During a brainstorm, everyone's ideas are accepted *without comment*. Every idea is considered helpful and valid and is written down on a whiteboard. Everyone is *required* to have and say out loud two "bad" ideas, but they are never allowed to say which ones were their "bad" ideas. This develops a habit of allowing creativity by saying and accepting wild ideas.

White-black sheep ideation: If a specific design solution is being discussed, an opposite design solution is discussed with just as much seriousness and rigour. Sometimes, the team splits internally to work on the separate design solutions without influencing each other. This develops the habit of not focusing on a single design solution too much.

Free association: Sometimes, a problem just needs free association. Team members say literally any words one after another until an idea emerges. This develops the habit of relaxing for creativity to flow.

Seven things: One person names a category of things and the next person says seven things that fit into that category as quickly as possible. After each thing, the group claps and counts. However, the category needs to be silly, difficult or an anti-category, e.g., seven things that are <u>not</u> red, or seven things that would live inside a shoe, or seven things that my dog would never sniff. The *only* objective is speed and poise: the speaker wants to go as quickly as possible and overcome their internal fear of being "right." In fact, even repeated answers are fine! Eventually, you can incorporate other elements into the exercise, like being more descriptive, or answering using a character.

Pair work: One person is the "driver" and the other the "navigator." Both people are 100% focused on achieving a task together. The driver does the work directly, the navigator facilitates the work by checking for mistakes, preparing materials that are needed next, articulating what the driver might be thinking. This is commonly done with coding, but can also work for writing and other creative projects.