

Kanaloa Team Member Expectations

All Kanaloa members should read this document fully.

- 1. This is a demanding (and subsequently rewarding) project.** Understand that you are participating in a cutting-edge research project; you will often find yourself facing novel problems no one has solved before (there are no answers in the back of the textbook in research!). To be successful in this context requires resourcefulness, creativity, persistence, and your ability to handle ambiguity--can you handle tasks with uncertain outcomes? We expect meaningful contributions, not just time spent.
- 2. Autonomy.** Just like our robots, you are expected to manage yourself autonomously; this is another way of saying that you are capable of *taking ownership* of your tasks. This includes:
 - a. Making steady, consistent progress on your tasks (instead of waiting until the last minute to start on them).
 - b. Predicting, mitigating, and overcoming blockers. You need to manage how and when to ask for help as well. Before it is too late, but not before you have done your "homework".
 - c. Be proactive in proposing new tasks to your manager based on the progress made on past ones.
- 3. Be a team player.** This project involves integrating multiple complex modules, developed by peers of different technical backgrounds and skill levels; an experience that is a major benefit to you. To be successful requires:
 - a. Great communication skills (more on this in the next bullet).
 - b. Attend, and participate in team meetings. Let your manager know when you're going to be late or absent. Team meeting time is crucial, and limited, so take it seriously!
 - c. Accept that things won't always go your way. Engineers are constantly making tradeoffs, and you will not always agree on the best course of action--this is natural and healthy in an engineering team. Agree on a method of making decisions beforehand (via your team contract), and stick to that method, even if it sometimes goes against your personal best interests.
- 4. Communicate clearly.** Great communication goes both ways; you must take care in ensuring your message is understood by others, *and* that you're a careful listener.
 - a. Don't be afraid to ask questions to clarify...and don't be offended to receive them. We all think and understand in different ways.
 - b. Always read your emails, someone took a lot of time to write them.
 - c. Report your progress to your subteam lead in a consistent manner by attending meetings, and participating in daily standups.
- 5. Documentation and writing.** Writing is an essential part of science and engineering. All Kanaloa students are required to write primer documents (how does this work?) or standard operating procedures (how do I get this to work?) for their work. At a minimum, this will be published on the RIP lab website, in a best case scenario, your work will be published in an academic conference or journal. As a researcher, you should aim for the latter.
- 6. Safety is paramount.** In the past you may have been a part of groups or institutions that took a lax approach to safety; this lab is not one of them. There is nothing we do in the lab that is worth risking your personal safety or well-being. All members must:
 - a. Covered shoes at all time when in the lab.

- b. At minimum, safety glasses and long pants required when *any* form of tooling (manual or power tool) is used. Additionally, safety glasses should be worn any time there is a potential hazard (e.g. working inside the power boxes). Use good judgement.
 - c. Keep your workspace clean and clear of hazards. Hazards can include exposed sharps, cluttered workspace or walkspace, trip hazards, power tools left unattended, etc.
 - d. Promote good safety culture by “self-policing”. Sometimes we can forget to put on safety glasses or clean up after ourselves; our peers are there to remind us. Don’t be offended or annoyed if someone questions the current or suggests additional safety protocols.
 - e. Report all safety incidents. Address the situation first, then inform your supervisor *immediately*. This culture is not in place to “put blame”, but rather, to allow everyone to learn from the experience to prevent it from happening in the future.
7. **Cleanliness.** *Cleanup is not optional.* Cleanliness is both part safety, and part consideration for your peers. You will be working on an active research lab with limited space; a cluttered work area leads to safety hazards, and is very inconsiderate to your peers who need to work and be productive in the same area. You must explicitly allocate time at the end of your work session to cleanup your workspace, or through good communication positively identify someone who will do it for you immediately after leaving.
8. **Follow your team contract.** Your individual project team will develop a team contract that outlines detailed team policies and expectations in addition to those listed here. You are required to abide by the policies listed in both documents. Take time to carefully read both.
9. **Have fun.** At times, things will get stressful. Deadlines will creep up on you, machines will break, your code will throw errors, and Murphy will have his way. But never forget the end goal; you are here because you’re passionate about robotics, and want to leverage this passion in ways that will help the world. (Hint: you can help reduce stress by following 2.a: steady consistent progress.)

Things that are **not** expectations

1. **“I don’t have any prior knowledge in robotics, therefore I shouldn’t join.”** There are three elements of a “smart” individual: intelligence, knowledge, and grit.
- *Intelligence* determines your capacity for understanding, creativity, and problem solving
 - *Knowledge* is accumulated over time through experience and education
 - *Grit* is your passion, and motivation to achieve the end goal
- As students in science and engineering, by definition, you are reasonably intelligent individuals with (relatively) little knowledge, and a level of grit *that you are free to choose*. We *do not* care about your level of knowledge as an incoming student; we can teach you the things you need to learn. What truly matters is your ability and motivation to learn and grow, your attitude, and your willingness to pass your knowledge on to your peers. If you can manage this, you will be successful on our team.
2. **“Robotics is my life. It's all I'm interested in. I love this project so much, I should drop my other life priorities and concentrate on this.”** Balance is important. Your ability to “juggle” other priorities is a crucial part of being an effective engineer and citizen in society. Sometimes midterms roll around, and other life tasks should take priority. This is a natural and expected part of being a student researcher. Practice effective communication. Work with your managers to set reasonable, achievable goals given your time commitments, and then make steady progress.