



VCU College of Engineering

25-044 CCAC Service Catalog

Team Contract

Prepared for

Robert Dahlberg

Commonwealth Center for Advanced Computing (CCAC)

By

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Step 1: Get to Know One Another. Gather Basic Information.

Task: This initial time together is important to form a strong team dynamic and get to know each other more as people outside of class time. Consider ways to develop positive working relationships with others, while remaining open and personal. Learn each other's strengths and discuss good/bad team experiences. This is also a good opportunity to start to better understand each other's communication and working styles.

| <i>Team Member Name</i> | <i>Strengths each member brings to the group</i> | <i>Other Info</i> | <i>Contact Info</i> |
|--------------------------------|---|---|--|
| Akhil Manoj | Quick learner, proficient in multiple programming languages, goal-oriented | I enjoy taking on interesting challenges and learning new things | manoja2@vcu.edu 804-309-8888 |
| <i>Bilal Othman</i> | Adaptability and Continuous Learning. Attention to Detail. Good Background in programming languages | Currently, I work part-time at NNS, where we specialize in constructing aircraft and submarines | Othmanb@vcu.edu 804-956-8505 |
| Nick Arthur | Motivated and persistent. I like to have things completed before deadlines. | I am a double major: Computer Science and Applied Mathematics | arthurn2@vcu.edu 571-577-3143 |
| Sage Walker | Good at resolving interpersonal conflict, hard-working, and good at following schedules. | I am also the treasurer for VCU, Crew, as well as a TA for 254. I am pursuing a minor in Mathematics. | walkers15@vcu.edu (703) 232-7876 |

| <i>Other Stakeholders</i> | <i>Notes</i> | <i>Contact Info</i> |
|----------------------------------|---------------------|--|
| Robert Dahlberg | | dahlberggra@vcu.edu |

Step 2: Team Culture. Clarify the Group's Purpose and Culture Goals.

Task: Discuss how each team member wants to be treated to encourage them to make valuable contributions to the group and how each team member would like to feel recognized for their efforts. Discuss how the team will foster an environment where each team member feels they are accountable for their actions and the way they contribute to the project. These are your Culture Goals (left column). How do the students demonstrate these culture goals? These are your Actions (middle column). Finally, how do students deviate from the team's culture goals? What are ways that other team members can notice when that culture goal is no longer being honored in team dynamics? These are your Warning Signs (right column).

Resources: More information and an example Team Culture can be found in the Biodesign Student Guide "Intentional Teamwork" page ([webpage](#) | [PDF](#))

| <i>Culture Goals</i> | <i>Actions</i> | <i>Warning Signs</i> |
|----------------------------------|---|--|
| Punctuality | <ul style="list-style-type: none">- Set up meetings through Zoom- Send a message reminder in Discord the day before the meeting | <ul style="list-style-type: none">- Student misses first meeting, warning is granted- Student misses meetings afterwards – issue is brought up with faculty advisor- Student appears stressed, out of the loop |
| Communication & Accountability | <ul style="list-style-type: none">- Stay on top of time management (classes, jobs, etc)- Use built-in time buffers when planning deadlines | <ul style="list-style-type: none">- Student is unreachable- Student has no quantifiable progress on their tasks from meeting to meeting |
| Respectfulness & Professionalism | <ul style="list-style-type: none">- Treat the faculty advisor/sponsor as a real-world client- Treat the other members of the teams as equals and respect each other's opinions | <ul style="list-style-type: none">- Student has aggressive tone, noticeable irritability- Other students are uncomfortable with communicating to student in question because of their behavior |

Step 3: Time Commitments, Meeting Structure, and Communication

Task: Discuss the anticipated time commitments for the group project. Consider the following questions (don't answer these questions in the box below):

- What are reasonable time commitments for everyone to invest in this project?
- What other activities and commitments do group members have in their lives?
- How will we communicate with each other?
- When will we meet as a team? Where will we meet? How Often?
- Who will run the meetings? Will there be an assigned team leader or scribe? Does that position rotate or will the same person take on that role for the duration of the project?

Required: How often you will meet with your faculty advisor, where you will meet, and how the meetings will be conducted. Who arranges these meetings?

See examples below.

| <i>Meeting Participants</i> | <i>Frequency Dates and Times / Locations</i> | <i>Meeting Goals Responsible Party</i> |
|-----------------------------------|---|--|
| <i>Students Only</i> | <i>As Needed, On Discord Voice Channel</i> | <i>Meet to discuss any current roadblocks as needed</i> |
| <i>Students Only</i> | <i>Weekly on Tuesdays, full attendance is expected</i> | <i>Give updates on the current status of each team member's task. Discuss any current roadblocks or issues Plan out work to be done in the upcoming week</i> |
| <i>Students + Faculty advisor</i> | <i>Weekly on Thursdays, full attendance is expected</i> | <i>Update faculty advisor and get answers to our questions. We will all take notes and participate by asking question (if we have any)</i> |

Step 4: Determine Individual Roles and Responsibilities

Task: As part of the Capstone Team experience, each member will take on a leadership role, *in addition to* contributing to the overall weekly action items for the project. Some common leadership roles for Capstone projects are listed below. Other roles may be assigned with approval of your faculty advisor as deemed fit for the project. For the entirety of the project, you should communicate progress to your advisor specifically with regard to your role.

- **Before meeting with your team**, take some time to ask yourself: what is my “natural” role in this group (strengths)? How can I use this experience to help me grow and develop more?
- **As a group**, discuss the various tasks needed for the project and role preferences. Then assign roles in the table on the next page. Try to create a team dynamic that is fair and equitable, while promoting the strengths of each member.

Communication Leaders

Suggested: Assign a team member to be the primary contact for the client/sponsor. This person will schedule meetings, send updates, and ensure deliverables are met.

Suggested: Assign a team member to be the primary contact for faculty advisor. This person will schedule meetings, send updates, and ensure deliverables are met.

Common Leadership Roles for Capstone

1. **Project Manager:** Manages all tasks; develops overall schedule for project; writes agendas and runs meetings; reviews and monitors individual action items; creates an environment where team members are respected, take risks and feel safe expressing their ideas.
Required: On Edusourced, under the Team tab, make sure that this student is assigned the Project Manager role. This is required so that Capstone program staff can easily identify a single contact person, especially for items like Purchasing and Receiving project supplies.
2. **Logistics Manager:** coordinates all internal and external interactions; lead in establishing contact within and outside of organization, following up on communication of commitments, obtaining information for the team; documents meeting minutes; manages facility and resource usage.
3. **Financial Manager:** researches/benchmarks technical purchases and acquisitions; conducts pricing analysis and budget justifications on proposed purchases; carries out team purchase requests; monitors team budget.
4. **Systems Engineer:** analyzes Client initial design specification and leads establishment of product specifications; monitors, coordinates and manages integration of sub-systems in the prototype; develops and recommends system architecture and manages product interfaces.
5. **Test Engineer:** oversees experimental design, test plan, procedures and data analysis; acquires data acquisition equipment and any necessary software; establishes test protocols and schedules; oversees statistical analysis of results; leads presentation of experimental finding and resulting recommendations.
6. **Manufacturing Engineer:** coordinates all fabrication required to meet final prototype requirements; oversees that all engineering drawings meet the requirements of machine shop or vendor; reviews designs to ensure design for manufacturing; determines realistic timing for fabrication and quality; develops schedule for all manufacturing.

| <i>Team Member</i> | <i>Role(s)</i> | <i>Responsibilities</i> |
|---------------------------|-----------------------|--|
| Akhil Manoj | Project Manager | <ul style="list-style-type: none"> ✓ Be the primary communicator between the team and faculty advisor/project sponsor ✓ Make sure everyone understands what is going on |
| Sage Walker | Financial Manager | <ul style="list-style-type: none"> ✓ conduct pricing analysis and budget justifications ✓ log purchases and submit receipts to appropriate entities ✓ carry out team purchase requests ✓ monitor budget |
| Nick Arthur | Record keeping | <ul style="list-style-type: none"> ✓ <i>Take notes during weekly meeting with Dahlberg</i> ✓ <i>Save and share notes with the team in GitHub (maybe Discord, but GitHub primarily).</i> |
| Bilal Othman | Task Coordinator | <ul style="list-style-type: none"> ✓ Provide regular updates to the Project Manager about the status of tasks and any potential delays. ✓ Help team members with any issues or obstacles they might encounter in completing their tasks. |

Step 5: Agree to the above team contract

Team Member: Akhil Manoj

Signature: Akhil Manoj

Team Member: Bilal Othman

Signature: Bilal Othman

Team Member: Nick Arthur

Signature: Nick Arthur

Team Member: Malika Sage Walker *Signature:* Malika Sage Walker