Project Scope and Code of Conduct

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Team 520: Simulated Assembly Line and Processing Workstation

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# Chapter One: EML 4551C

## Project Scope

Team 520’s project of Simulated Assembly Line and Processing Workstation will consist of rebuilding a manufacturing machine that will be able to detect plastic in the necessary objects and then remove them from the processing line. During the construction of the machine, the group is also expected to understand the deconstruction of the machine as a way of understanding manufacturing flexibility. This machine will be capable of detecting and processing products in a factory-style setting that will teach the integration of electrical and mechanical components in the engineering world. A capacitive detection manufacturing machine is crucial to many industries such as the food industry, by helping to detect plastic that made its way into food, or the travel industry in order to detect plastic items that are not allowed during travel. Environmentalists could find use in the detecting technology to clear the ocean or lakes of plastic. Manufacturing machines are necessary in most mass production settings including clothing and electronics, making the project relevant to many different markets.

It is assumed that Tallahassee Community College will provide the group with a partially constructed manufacturing machine that will then be rebuilt using some provided parts from their Advanced Manufacturing Lab. The major stakeholders in this project include Tallahassee Community College (TCC), and the students of TCC that will use the machine as learning or other project piece.

# Code of Conduct

Mission Statement

The goal for team 520 is to ensure a positive and productive work and research environment that will yield ultimate success in the project. Each team member is committed to embracing integrity, professionalism, and respect while dedicating maximum effort towards the success of the project.

Team Roles

* David DiMaggio - Design Engineer

The duties of the Design Engineer include performing research in order to create new ideas for the project systems while collaborating heavily with the Test Engineer during assembly to produce the required system. They will also improve quality and efficiency of existing products to fit the customer requirements using CAD modeling software such as SolidWorks or Pro Creo to model the product before manufacturing for efficient assembly and testing.

* Cheyenne Laurel - Project Manager

The Project Manager is responsible for the overall progression of the project to meet deadlines as well as handle financial budgeting for the project. The Project Manager will be in charge of communication between the group’s sponsor and advisor throughout the project to ensure no member is out of touch. They will be responsible for setting all group meetings according to team needs as well as representing the team during events and presentations.

* Boluwatife Olabiran - Software Engineer

The Software Engineer will be creating the coding and programming necessary to integrate the electrical and mechanical parts of the assembly line. Using C and Python programming, the Program Engineer will be responsible for applying the necessary commands to the manufacturing machine.

* Nataajah Taylor - Hardware Engineer

The Hardware Engineer is responsible for assessing and assigning appropriate electrical and programmable parts for the project. Also working with the Program Engineer to ensure working software for the electrical components, and programmable parts.

* Joell Williams - Test Engineer

The Test Engineer will ensure the assuring parts and systems are up to the project qualifications. Responsibilities will also include working closely with Software Engineer, Hardware Engineer, and Design Engineer to relate any bugs or improvements within the production.

Communication

For Team 520, the main form of communication will text messaging in a group chat containing all group members. GroupMe will be used as a second option to texting to accommodate for all phone models. Email is the second primary form of communication used to send any important information regarding meeting times and locations, important sponsorship information, and file transfer. To ensure that each team member has access to all necessary files, each file will be uploaded to the group's Google Drive so there are no missing documents.

Each team member will need to reply to any messages from the Project Manager and other group members within 24 hours to confirm meeting times and locations. As well, each member will have to notify the rest of the group at least 24 hours in advance if they are unable to make the agreed upon meeting time, while also providing a new available time to meet. Failure to do so will be noted amongst other group members for final evaluations and may result in a larger workload for such member.

Dress Code

Team meetings and advisor meetings can be attended in casual attire that must be appropriate still. Sponsor meetings, group presentations, and other formal outings must be attended in business casual or formal attire, of which will be specified by the Project Manager at least 24 hours before the event.

Attendance Policy

Team members are expected to appear and participate in all meetings with the sponsor, advisor and instructor. Ideas, budgets, project progress, timelines, conflicts, due dates and submissions will be discussed. Absence is not acceptable unless prior notification is given with genuine reasons or due to unforeseen and emergency situations. Repeated absences will not be allowed.

Decision Making and Conflict Resolution

Any decisions or conflicts will be referred to the group majority process in order to determine the final decision or resolution.

1. The first step will require the problem or decision to be explained to the entire group while allowing questions to make sure all components or conflicts are understood by the team members.
2. The group will come to a resolution of three final choices or resolutions that are cohesively decided by all members of the group.
3. The final choices will be held to a group vote where the majority vote will decide the final resolution.

When deciding on other choices such as unassigned tasks, the group will deliberate to whoever feels most comfortable with the task at hand in order to handle it. If no volunteer comes forth, then the task will be assigned based to the member whose project role most closely encompasses the task.

Statement of Understanding

By signing this document, each member of Team 520 acknowledges and agrees to the code of conduct set forth by the class and the group.

Name Signature Date

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