# **FAMU/FSU** College of Engineering

# **Department of Mechanical Engineering**

# **Code of Conduct**

# **Group 9 – Automated Microalgae Photobioreactor Harvester**

Names: Contact Email:
Yuri Lopes yml12@my.fsu.edu
Benjamin Bazyler bjb12e@my.fsu.edu
Courtnie Garko cmg11k@my.fsu.edu
Tomas Solano ts11h@my.fsu.edu
Kaelyn Badura ksb12@my.fsu.edu

Date: October 2<sup>nd</sup>, 2015

### **Mission Statement**

Team 9 is dedicated to creating a positive and professional work environment where all team members have an equal opportunity to collaborate, provide ideas, and discuss project aspects. Additionally, the team members are committed to contributing their fair share of work to ensure completion of the project. Successful completion of this project will yield the refinement of vital team building skills, opportunities for professional and academic development, and hands on experience with technical engineering problem solving.

### **Roles**

Each team member will be delegated a specific role based on their experiences and skill sets and is responsible for all task assignments here-within:

Our two team leaders will manage the team as a whole while working together to communicate between Curitiba, Brazil and Tallahassee, Florida.

# Team Leader: Kaelyn Badura (UFPR – Curitiba) Team Leader: Yuri Lopes (FSU - Tallahassee)

Team leaders will delegate tasks and review and revise all deliverables before submission. The team leaders are responsible for keeping a positive and professional working environment. Team leaders will serve as primary points of contact and information dissemination and manage communication throughout the group. Team leaders will also establish meeting times and timeline projections.

### Financial Advisor, Inventory Manager: Benjamin Bazyler

The Financial Advisor will be responsible for managing the budget throughout the duration of the project. This includes assessing all possible options for purchase, discussing with the group members what selections would be best for the given budget, communicating the selection plans with the advisor for approval, ordering correct parts, and keeping and extensive log of purchases. This log also includes product specifications, storage location, and responsible party. In the event that the allotted funds are insufficient, the Financial Advisor will be responsible for finding an alternative donor.

## Lead Mechanical Engineer: Tomas Solano

The Lead Mechanical Engineer is responsible for presenting design options for each aspect of the project. While brainstorming options, the Lead ME will be responsible for keeping records of all possible designs. Once designs are selected, the Lead ME is responsible for knowing and implementing all aspects of the design.

## Scale up/Production Engineer: Courtnie Garko

The scale up/production engineer is responsible for the setup of the main photo bioreactor and algae production at FSU. The scaling of the project and responsibility of initial cultivation will be led by this member. In close relation with the financial advisor/inventory manager the scale up/production engineer will be responsible for cost estimation of the final production to be evaluated.

## **All Team Members:**

- Work on certain tasks of the project
- Contribute to the project goals and success
- Deliver on commitments
- Adopt team spirit

- Listen and contribute constructively (feedback)
- Communicate effectively and efficiently
- Be considerate and respectful of others ideas
- Respect others roles and ideas
- Be ambassador to the outside world in own tasks

### **Communication**

The main method of communication for the group will be through video conferencing service. Emails and messenger applications will be used as the secondary communication device and a cloud storage system will serve as collaboration space.

Each member is responsible for having a working email, video conferencing service, and messenger application. Team leaders are responsible for setting up group discussions and coordinating times for video calls for all team members. Emails will be used to send large files and information. A cloud storage will be used as a method of editing deliverables simultaneously and sharing collaborative efforts.

If a team member is unable to make a deadline or attend a video conference call, they will be responsible for notifying the team leaders and for any missed information.

## **Team Dynamics**

The students will work as a team while allowing one another to feel free to make any suggestions or constructive criticisms without fear of ridicule or chastised. If any member on this team finds a task to be too difficult or demanding it is expected that the member should ask for help from the other teammates. If any member of the team feels they are not being respected or taken seriously, that member must bring it to the attention of the team in order for the issue to be resolved.

#### **Ethics**

Team members are required to be familiar with the NSPE Engineering Code of ethics as they are responsible for their obligations to the public, the client, the employer, and the profession. There will be stringent following of the NSPE Engineering Code of Ethics.

#### **Dress Code**

Team meetings will be held in casual attire. Sponsor meetings and group presentations will be business casual to formal as decided by the team per the event.

## Weekly and biweekly Tasks

Team members will participate in all meetings with the sponsor, adviser and instructor. During said times ideas, project progress, budget, conflicts, timelines and due dates will be discussed. In addition, tasks will be delegated to team members during these meetings. Repeat absences or lack of fulfillment of duties will not be tolerated.

## **Decision Making**

Decisions will be conducted through consensus. Dissention stemming from ethical or moral shall be evaluated as a group and the majority will decide on the plan of action. Individuals with conflicts of interest should not participate in decision-making processes but do not need to announce said conflict. It is up to each individual to act ethically and for the interests of the group and the goals of the project. Achieving the goal of the project will be the top priority for each group member. Below are the steps to be followed for each decision-making process:

- Problem Definition Define the problem and understand it. Discuss among the group.
- Tentative Solutions Brainstorm possible solutions. Discuss among group most plausible.
- Data/History Gathering and Analyses Gather necessary data required for implementing Tentative Solution. Re-evaluate Tentative Solution for plausibility and effectiveness.
- Design Design the Tentative Solution product and construct it. Re-evaluate for plausibility and effectiveness.
- Test and Simulation/Observation Test design for Tentative Solution and gather data. Re-evaluate for plausibility and effectiveness.
- Final Evaluation Evaluate the testing phase and determine its level of success. Decide if design can be improved and if time/budget allows for it.

### **Conflict Resolution**

In the event of discord amongst team members the following steps shall be respectfully employed:

- Communication of points of interest from both parties: including demonstration of active listening by both parties through paraphrasing or other tool acknowledging clear understanding.
- Administration of a vote, if needed, favoring majority rule.
- Team Leader intervention.
- Instructor will facilitate the resolution of conflicts.

## **Statement of Understanding**

By signing this document the members of Team 9 agree the all of the above and will abide by the code of conduct set forth by the group.

| <u>Name</u>        | <u>Signature</u>     | <u>Date</u> |
|--------------------|----------------------|-------------|
| Tomas Solano Munoz | <u>Tomas Solano</u>  | 10/01/2015  |
| Kaelyn Badura      | <u>Kaelyn Badura</u> | 10/01/2015  |
| Courtnie Garko     |                      |             |
| Yuri Lopes         |                      |             |
| Benjamin Bazyler   |                      |             |