FAMU/FSU College of Engineering

Department of Mechanical Engineering

Code of Conduct

EML 4551C- Senior Design- Fall 2013
Team 7-Microalgae Photobioreactor

Stephen Kassing
Markus Dillman
Diego Soler
Matt Vedrin

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Department of Mechanical Engineering, Florida State University, Tallahassee, FL
Project Advisors
Dr. Chiang Shih
Department of Mechanical Engineering
Dr. Kamal Amin

Mission Statement

The Microalgae Photobioreactor Team, Team 7, will work in a professional manner and perform his or her task to the best of their ability. Each team member will respect each other and be committed to the ultimate objective of the team.

Roles

Each team member will be assigned a role that will help the team benefit as a whole. The roles are to be delegated based on each team members strengths:

Team Leader – Stephen Kassing

Manages the team, keeps each team member on the right track, and oversees group progress relative to project deadlines. Will be responsible for scheduling all group meetings in the US, including meetings with mentors, advisors, sponsors, etc. Will also manage the writing and submission of the invention disclosure in the US.

Financial Advisor - Stephen Kassing

Manages the budget and maintains a record of all credits and debits to project account. Any product or expenditure requests must be presented to the financial advisor, whom is then responsible for reviewing and analyzing equivalent/alternate solutions. The financial advisor then relays the information to the team and orders the selection if the request is granted. A record of these analyses and budget adjustments must be kept.

Lead Algae Engineer - Markus Dillman

Takes the lead on all algae related projects which primarily includes procurement of the algae and algae-food, growth and maintenance of a healthy algae culture, oversight of the of the algae transferring process into the photobioeactor, and management of any other team members involved in algae related projects.

Lead Mechatronic / Sensors Engineer - Diego Soler

Takes the lead on all mechatronic/sensor related projects, which primarily includes modification of previously developed sensors, procurement of related hardware and software, design and development of any new mechatronic or sensor related systems, management of any other team members involved in mechatronic/sensor related projects, and

Lead International Engineer - Matt Vedrin

Takes the lead on all international related projects in Brazil including the submission of the patent in Brazil and the management of the design and development of the requested algae extraction and media addition units. In addition, will be responsible for scheduling all group meetings in Brazil.

All Team Members

- Work on certain tasks of the project
- Buys into the project goals and success
- Delivers on commitments
- Adopt team spirit
- Listen and contribute constructively (feedback)
- Be effective in trying to get message across
- Be open minded to others ideas
- Respect others roles and ideas
- Be ambassador to the outside world in own tasks

Communication

The main form of communication will be over phone and text-messaging among the group, preferably phone as well as through regular meetings of the whole team. Email will be a secondary form of communication for issues not being time-sensitive. For the passing of information, i.e. files and presentations, email will be the main form of file transfer and proliferation.

Each group member must have a working email for the purposes of communication and file transference. Members must check their emails at least twice a day to check for important information and updates from the group. Although members will be initially informed via a phone call, meeting dates and pertinent information from the sponsor will additionally be sent over email so it is very important that each group member checks their email frequently.

If a meeting must be canceled, an email must be sent to the group at least 24 hours in advance.

Any team member that cannot attend a meeting must give advance notice of 24 hours informing the group of his absence. Reason for absence will be appreciated but not required if personal. Repeated absences in violation with this agreement will not be tolerated.

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 being ridiculed and/or embarrassed. If any member on this team finds a task to be too difficult 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. We shall NOT let emotions dictate our actions. Everything done is for the benefit of the project and together everyone achieves more.

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 will not be tolerated.

Decision Making

It is conducted by consensus and majority of the team members. Should ethical/moral reasons be cited for dissenting reason, then the ethics/morals 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 – Brainstorms 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 which may include 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 7 agree the all of the above and will abide by the code of conduct set forth by the group.

Name	Signature	Date
Stephen Kassing		
Markus Dillman		
Diego Soler		
Matt Vedrin		