

**FAMU/FSU College of Engineering
Department of Mechanical Engineering
Code of Conduct**

**Team # 10: Educational kit using an Alkaline
Membrane Fuel Cell**

Names:

Mustafa Nek (mn11h)

Collin Heiser (cjh10h)

Bryan Anderson (ba10f)

Nicolas Schulz (ns11)

James Richardson (jbr10)

Nicole Alvarez (ns11)

Date: 10/3/2014

Mission Statement

Team 10 is devoted to creating a strong positive work environment encouraging honesty, respect, and professional behavior. Every member of this team is determined to put forth a full effort to the development of a fully functioning portable AMFC. When successfully completed, the new design will be used as an educational tool.

Roles

Each team member is given a specific role based on their experience and skills and is responsible for all of the following:

Team Leader - Collin Heiser

For this project the team leader will be considered to be the project manager. They will be responsible for delegating tasks to group members based on their knowledge and skill sets. Also, they will be in charge of reviewing documentation and assignments to make sure they meet the standards set by the group. In the event of a problem, the team leader will act appropriately to resolve the issue in a way that has the best interest of the project and future teamwork in mind. The team leader is also responsible for keeping communication between group members and between the sponsor active. This will be done through scheduling weekly sponsor meetings with the intention of monitoring progress. During said meetings they will take notes of all important things being discussed as well as determine the next steps that the group needs to advance the project in a way that meets the sponsor's goal. Parts of this task can be delegated to other group members within reason. Overall the team leader will have the final decision on any aspect of the project and will have the most responsibility on the direction the project takes.

Brazil Team Leader – James Richardson

A team leader will be assigned for fall 2014 in order to keep communication running smoothly with classmates in Brazil. The team leader will be responsible for all communication amongst the members in Brazil, and will report to the team leader in FSU with any updates in the design.

Team Members:

Financial Advisor - Bryan Anderson

Analyzes and manages the budget and keeps record of all credits and debits to the project account. The financial advisor is responsible to contact the advisor (Juan Ordonez) about any product or purchase requests. The advisor also reviews the costs and analyzes the situation for alternate solutions that will benefit the overall projects interests. Budget is a large constraint of this project, thus any savings are vital to the success of the portable AMFC. He will consult with the other group members about this information and a decision will be made. Records of decisions and budget analysis must be kept on the shared Google Drive and available upon request.

Lead ME – Nicole Alvarez

Responsible for the mechanical design aspects of the project. In charge of knowing the details of the design. The lead ME will present options for each aspect of the design and

present them to the team for decision making. Keeps records of all mechanical designs including changes to the design. He/she is also responsible for gathering reports of the design.

Lead IE – Nicolas Shultz

Responsible for the industrial design aspects of the project. In charge of knowing the details of the design. The lead IE will present options for each aspect of the design and present them to the team for decision making. They are also responsible for keeping records of all the industrial designs.

Web Master/Assistant ME – Mustafa Nek

Responsible for designing and creating the senior design project website. Ensures all links and accessible information function correctly and will make sure the formatting of the website is concise and clear. The website will be made in such a way that sponsors and third party visitors will obtain a full understanding of our project. This will in turn develop a positive educational learning environment that students can use and learn about AMFC technology. They will review parts of the design to analyze the pros and cons of decisions that will be made once the product design process begins. In addition, he will assist the lead ME with any tasks the lead ME needs, including looking at parts of the design, testing, and optimizing the fuel cell.

All Team Members:

All team members are expected to communicate effectively and collectively work on the tasks of the project. Active participation is required in order to provide an open and warm work environment. The team will also be expected to provide constructive feedback on aspects of the design. All team members will be open minded and respect other team members' ideas.

*some tasks and responsibilities are subject to change pending the Brazilian group member contribution

Communication

There will be two main forms of communication between group members for this project. First, for the team members at FSU text messaging and phone calls will be the most effective method. In order to maintain communication with the team members in Brazil at least one skype call will be scheduled each week. The text messaging app known as WhatsApp will be used to communicate with the brazil members as well due to its free international messaging. Also, email will be used as a secondary form of communication for matters that are not as urgent. All group members must have a working skype and email account to maintain effective communication.

Email should be checked at least twice a day to stay current with all group updates and important information. Most meeting times will be sent over email so this is especially important. If there is an urgent matter that needs to be addressed immediately a phone call will be made to all group members. All meetings will be mandatory for all group members. In the situation that a meeting must be canceled all group members must be notified 24 hours in advanced. Also, if a team member is unable to attend any meeting they must notify the group 24

hours in advance and state the reason if it is not personal. Repeated absences in violation with this agreement will not be tolerated.

Team Dynamics

The team dynamic should allow all members to feel comfortable to make any suggestion or provide constructive criticism. No member should be afraid of negative consequences to any of these actions. Also, if a group member is finding that a task is too challenging they should ask for assistance from the other members in the group. If any member in the group feels that they are not being treated fairly or not being taken seriously they must bring it to the attention of the entire team if they want the issue to be resolved. These problems need to be quickly addressed so that emotions within the group do not affect the overall performance and results of the project.

Ethics

Team members are expected to know the NSPE Engineering Code of ethics. Also, as an engineer they maintain a responsibility to the public, client and the employer. If there is a violation of the NSPE Code of ethics proper disciplinary action will be taken.

Dress Code

Team meetings will be held in casual attire. All sponsor meetings and presentations will be business casual to formal. This will be decided by the team before the event.

Weekly and Biweekly Tasks

As stated previously team members will participate in all meetings with the instructor, sponsor and advisor. During these meetings we will be discussing everything involving the current status of the project as well as delegating tasks. These meetings are mandatory and repeated absences will not be tolerated.

Decision Making

The decision making process will be decided by a collective consensus and a majority vote will be made by the team members. If ethical/moral reasons conflict with that of agreed upon decisions, then the ethics and morals will be evaluated and a plan of action will be determined. Members with conflicts of interest should not be a part of the decision making. Each member will follow the ethical and moral standards provided by NSPE code of ethics. There are five steps for the decision making process. First we must define the problem at hand, what is the problem? this must be defined and discussed among the group. Sometimes in the decision making process a correct decision cannot be made because the answer has not yet presented itself. In this case temporary solutions are necessary. The team must think about other solutions, while maintaining the need for a practical solution. It is important for all parties to understand the perfect solution does not always exist in a practical way, doing the best for the given situation can be the correct solution. As time passes certain data may present itself, at that time certain solutions may have to be reanalyzed by the team and new solutions formed. Eventually a hard model for the AMFC will be built, designing this is an important requirement. This design may be subject to change as the project grows. Finally once a prototype is created the alkaline membrane fuel cell must be evaluated and the level of accomplishment decided. At that time some components may need to be improved, assuming the finances permit these revisions will be decided as a team and those which improve the fuel cell be implemented.

Conflict Resolution

If a conflict in the group arises team members will be expected to handle the matter professionally. All group members will meet, listening to both parties involved for a more complete picture of the issue. If still both parties cannot reach an understanding, there will be a discussion followed by performing a majority vote (involved parties will leave the room prior to the vote). If still then a resolution cannot be found, at that point the team will involve the instructors. This is a last and worst case scenario, all members of the educational AMFC kit are level headed young professionals and no major conflicts are anticipated, a solution is prepared however.

Statement of Understanding

By signing this document the members of Team 10 agree to 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>
<u>Bryan Anderson</u>	<u></u>	<u>10/3/2014</u>
<u>Mustafa Nek</u>	<u></u>	<u>10/3/2014</u>
<u>Collin Heiser</u>	<u>Collin Heiser</u>	<u>10/3/2014</u>
<u>Nicole Alvarez</u>	<u></u>	<u>10/3/2014</u>
<u>James Richardson</u>	<u></u>	<u>10/3/2014</u>
<u>Nicolas Schutz</u>	<u></u>	<u>10/3/2014</u>