

FAMU/FSU College of Engineering
Department of Mechanical Engineering

Code of Conduct



Team 22 “MARSRAM”: NASA Robotic Mining Competition

| <u>Names</u> | <u>Contact Email</u> |
|----------------------------|-----------------------------|
| Jonathan MacDonald | Jdm11m@my.fsu.edu |
| Zachary Moore | Ztm13b@my.fsu.edu |
| Andrew Svendsen | Ars14s@my.fsu.edu |
| Alexandria Woodruff | Amw12k@my.fsu.edu |

Faculty Advisor: Dr. Jonathan Clarke

Sponsor: NASA

Instructor: Dr. Nikhil Gupta

Date: 09/16/2016

Mission Statement

The Collegiate Design series Robotic Mining Rover Team (#22: MARSRAM) will be responsible for adhering to the design specifications set in place by the NASA Robotic Mining Competition guidelines. Using sound engineering practices, thorough design, research and testing, we will uphold moral values which contributes to safety during operation. Every member of this team will contribute a full effort to the creation and maintenance of such an environment in order to bring out the best in all of us as well as this project.

Roles

Team Leader – Jonathan MacDonald

- Manages the team as a whole
- Develops a plan and timeline for the project
- Delegates tasks among group member according to their skill sets
- Finalizes all documents and provides input on other positions where needed
- Responsible for promoting synergy and increased teamwork
 - If a problem arises, the team leader will act in the best interest of the project
- Keeps the communication flowing between team members and Sponsor
- Leads in organizing, planning, and setting up of meetings
- Facilitates presentations by individual team members and is responsible for overall project plans and progress

Treasury and Scheduling Lead - Alexandria Woodruff

- Financials
 - Maximum budget
 - Current balance
 - Purchasing and Invoice processing
 - Expenditure requests between advisor/sponsor
- Personnel Management
 - Record keeping for meetings
 - Extended Communications if applicable

Fabrication and Vehicle Design Lead - Andrew Svendsen

- Responsible for hardware fabrication
- Responsible for vehicle and mechanical hardware design
- Web design and management

Systems Integration and Analysis Lead - Zachary Moore

- Keeps all design documentation for records and is responsible for gathering all reports

- Responsible for computational analysis on system components
- Responsible for presenting the options for each aspect to the team for the decision process

All Team Members:

- Communicate effectively and professionally with all team members and advising/sponsor personnel
- Responsible for completing scheduled deadlines in a timely and professional manner
- Maintaining professional demeanor
- Attending scheduled meetings and presentations
- Respect project decisions and ideas made by the group

Communication

The main form of communication will be over phone and text-messaging among the group as well as through regular meetings. Email will be a secondary form of communication for issues not being time-sensitive. For the passing of information, i.e. files and presentations, Onedrive and Google Drive will be the main forms 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 4 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 team members should feel free to talk freely and make constructive suggestions to each other. If faced with a difficult task one should ask other team members for help. 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. Team members are expected to display themselves in a professional manner unless otherwise stated.

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. In the event of a team member being unable to attend a meeting due to personal conflicts the team member absent from the meeting is responsible for scheduling a makeup session with the team leader that will occur no more than 3 days after the missed meeting.

Decision Making

Decisions will be conducted by consensus and majority vote 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.

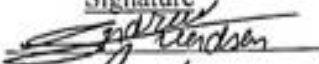
Conflict Resolution

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 1 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> |
|----------------------------|---|-----------------|
| <u>Andrew Svendsen</u> | <u></u> | <u>09/15/16</u> |
| <u>Jonathan MacDank</u> | <u></u> | <u>9/15/16</u> |
| <u>Zachary Moore</u> | <u></u> | <u>9/15/16</u> |
| <u>Alexandria Woodruff</u> | <u></u> | <u>9/15/16</u> |