

Jr. Robotics Welcome Letter & Syllabus

Jr. Robotics: The Alien Encounter

Welcome to another semester of LEGO Mindstorms Robotics. This semester we will be embarking on an Alien Adventure. All of our robotics activities will be centered on a theme: You have crash landed on a strange planet, your ship is in pieces, and you need to build a “planet rover” to explore this new land and collect data that will get you home.

I have included some information below that details how I plan to handle our adventure!

Teams: We will be working in teams of 4 students per team. LEGO Programming materials are designed for teams of 4. We will build our teams at the beginning of class and each team will remain together for the semester.

What to Expect: Our adventure will be broken into three sections...each section allowing us to explore the strange planet we have crash landed upon. Each team will build a RoboRovor that will map planet terrain, a RoboGrabber for exploring the Planet Environment, and a RoboAlien so we may interpret RoboAlien Behavior. ***No Homework will be assigned – but some creative thinking and brainstorming at home may be required.***

Computers: We will be using 2 laptop computers in our class to program our 4 robots. On occasion, waiting for your turn at the computer produces some “downtime” for students. Good behavior is expected from those who are waiting their turn at the computer.

What to Bring: *folder to keep program ideas / information for class, **paper and pencil***

Newsletter: I know in our house it is hard to make a fantastic LEGO creation, and then have to take it apart and put it away. I will be taking digital pictures of our robots (and kids) throughout our alien adventure. I will place these in an e-mail newsletter every other week and blast them to your inboxes. It sure is a fun way to see what your kids are learning in LEGOS!

Spring Program: We will be displaying our Alien Adventures Robots and their tricks at the Spring Program.

Syllabus: I usually map out all the details of a class...but this semester I am going to follow an outline to give our class flexibility. As one step of the project is completed, we will move on to the next. I have included the outline of our class in the next document.

Feel free to contact me at anytime with any questions or concerns ☺

Jennifer Allen

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Jr. Robotics:
The Alien Encounter Class Outline

Instructor: Jennifer Allen

RoboRover

- Part 1: Create a RoboRover
- Part 2: Control a RoboRover
- Part 3: Map the Planet Terrain

RoboGrabber

- Part 1: Create a RoboGrabber to
Go Get Rocks
- Part 2: Trek New Terrain
- Part 3: Explore the Planet Environment

RoboAlien

- Part 1: Create a RoboAlien
- Part 2: Communicate with a RoboAlien
- Part 3: Interpret RoboAlien Behavior

Spring Break - No Classes Wednesday, March 17

Classes meet in the Parlor from 2:00 - 3:00.

Remember to come prepared with pencils, paper, and a folder
for keeping track of ideas and information!