

Science Fair 2.0: A Year in Space

Grades:	4 – 7
Day of Week:	Wednesday
Time of Class:	3:00 – 4:30 PM EST
Length of Class:	10 weeks
Semester:	Fall 2021
Tuition:	\$250.00

Class Dates:

Week 1: Week of October 4

Week 2: Week of October 11

Week 3: Week October 18

Week 4: Week of October 25

Week 5: Week of November 1

Week 6: Week of November 8

Week 7: Week of November 15

No classes: November 22 – November 26 (Thanksgiving Week)

Week 8: Week of November 29

Week 9: Week of December 6

Week 10: Week of December 13

Make Up Week: Week of January 3

Instructor's Name: **Brittany Robbins**
Instructor's Email: RobbinsLife@gmail.com

Description of Class:

In this course, students will explore the wonders and challenges of living in space and sharpen their research and problem-solving skills. Gone are the days of the dreaded science fair

project! In this course, critical thinking will be key, as students identify a specific problem faced by astronauts who embark on long-duration space travel and then work to create a unique solution to this problem. The course will culminate in an individual final project, which students will present to classmates.

Class Approach:

This course will be a mixture of lively class discussions and group brainstorming sessions. Students will be encouraged to actively participate in live classes.

Goals:

Students will discover new ideas about life in space, implement the Engineering Design Process, and use creativity and persistence to develop an innovative solution to a real-world problem. Students will learn how to identify credible sources of information while performing research on a chosen topic. Students will craft a written paragraph related to their research topic and learn how to create a works cited list.

Textbook:

“Endurance: My Year in Space and How I Got There” (Young Reader’s Edition)

by Scott Kelly

ISBN-13: 9781524764272

https://www.amazon.com/Endurance-Young-Readers-Space-There/dp/1524764272/ref=sr_1_fkmr0_2?dchild=1&keywords=“Endurance%3A+My+Year+in+Space+and+How+I+Got+There”+%28Young+Reader’s+Edition%29+by+Scott+Kelly+ISBN-13%3A+9781524764272&qid=1611153690&sr=8-2-fkmr0

Additional Supplies/Resources Needed:

Student should come to class prepared with a notebook or binder for organizing handouts and notes.

Students will be provided with a list of any requested supplies prior to each class.

These items will be things found around the house (LEGO bricks, paper, and colored pencils, etc.)

Requirements:

Attending class and/or watching the recording as soon as possible. Respectful behavior is a must!

Homework Policy:

Students should expect to spend 1 – 2 hours each week on reading assignments and project research. Students will be given periodic written assignments throughout the course, culminating in an individual final class project. Students will present this final project to classmates.

Anticipated Weekly Course Schedule:

Week	Topic
Week 1	Course Introduction / Who is Scott Kelly? / Begin <i>Endurance</i>
Week 2	History of Space Travel / Exploring the ISS / Women in Space
Week 3	What's the Problem? Exploring issues faced during long-duration space travel / Maslow's Hierarchy of Needs
Week 4	Investigation: Physiological Needs
Week 5	Investigation: Safety Needs
Week 6	Investigation: Love & Belonging
Week 7	Engineering Design Process / Research 101: Credible Sources
Week 8	Research 101: Clearly Defining the Problem & Writing a Research Paragraph
Week 9	Research 101: Creating a Works Cited List & Presentation Preparation
Week 10	Final Project Presentations