

Aerospace Engineering Course Information – September 2016

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Course	6027 AEROSPACE ENGINEERING (PLTW-AE) 5 periods per week (1.00 Credit / Weight 1.06)	
Textbook	Course Materials are on the Project Lead The Way Learning Management System (PLTW LMS) available at PLTW.org Supplementary Text: Senson & Ritter, <i>Aerospace Engineering From the Ground Up</i> , DELMAR Cengage Learning	
Description	Aerospace Engineering In Project Lead The Way (PLTW) Engineering, students engage in activities, projects and open-ended problem solving, in which they learn and apply the engineering design process, and use the same industry-leading technology and software as are used in the world's top companies. This course offers an overview of topics in Aerospace and Aeronautical Engineering	
Major Topics	Introduction to Aerospace	Evolution of Flight Physics of Flight Flight Planning & Navigation
	Aerospace Design	Materials & Structures Propulsion Flight Physiology
	Space	Space Travel Orbital Mechanics
	Alternative Applications	Alternative Applications (e.g. wind turbines, airfoils) Remote Systems (Robotics) Aerospace Careers
Final Exam	PLTW End of Course Exam, Local Course Exam	
Projects & Activities	This course is based predominantly on learning activities and projects. Students are expected to complete all activities and course projects on time. Projects will have a 5-day grace period after the due date. Projects completed more than 5 days past the due date will be penalized for lateness.	
Grading - Approximate Weightings	A total points system will be used for calculating grades. Approximate weightings are as follows: Projects: 35% - 40% Activities: 35% - 40% Quizzes & Worksheets: 10% - 15% Tests: 10% Class Participation: 5% - 10%	

Homework	Students are likely to need spend a significant amount of time at home and/or outside of regularly scheduled classes in order to complete activities and projects.
Supplies	Supplies required to have in class every day: • Engineering Notebook or spiral bound graphing notebook. • 3-ring binder with dividers and loose leaf paper. The 3 ring binder must be used exclusively for the AE course. • Pen and pencil • Calculator: Scientific or graphing. • Access to school computer account and school email.
Class Participation Expectations	Every student is an important member of our class learning community. All students are expected to consistently attend class prepared to learn, adhere to classroom rules, and actively engage in both independent and collaborative learning activities. The use of cell phones and other electronic distractions is not permitted in class, unless students receive specific permission to use their personal electronic devices as part of a learning activity.
Classroom Rules	1. Bring all supplies to class every day. 2. Be in your assigned seat when the bell rings. 3. Follow directions from the teacher the first time they are given. 4. Be respectful of yourself, your fellow students, your teacher, and your school. 5. Leave the room quietly when your teacher dismisses you.
Safety	It is essential that students adhere to all Safety instructions provided by the instructor, and conduct themselves in a responsible manner while in the engineering lab. Students must wear closed-toe shoes while in the Engineering Lab (no open-toe shoes please.)
Office hours	I am generally available for extra help Tue - Thur after school until 3:15pm and by appointment.

PLEASE RETURN THIS PORTION TO YOUR INSTRUCTOR

I have read the attached course information for AEROSPACE ENGINEERING and have discussed these requirements and responsibilities with my parents/guardians.

(Student Signature)

I have read the attached course information for AEROSPACE ENGINEERING and have discussed these requirements and responsibilities with my son/daughter.

(Parent/Guardian Signature)

Is there any special information you think would be helpful for me to know regarding your son/daughter?