

# OHHS Science Department Course Syllabus



**Course Name:** Conceptual Physics B: Space Exploration

**Course Code:** SCO23B

**Course Description:** Conceptual Physics B focuses on the challenges of exploring space and the concepts involved, including rocket engineering, gravity, orbits, the history of the universe and waves.

**Course Resources**

- Textbook: cK-12 OHHS - Conceptual Physics: Crebbin, Frostad, Neal, Sawhill, Thayer, Turner, 2019.
- Student responsibility: notebook of choice

**Course Fees** None.

**Course Outline/Instructional Units**

Key Question: What is the relationship between motion, forces and energy in physical systems?

- Unit 1: Rocket Engineering
- Unit 2: Gravity & Orbits
- Unit 3: Light & Waves

**Major Assessments**

- Each unit has reading assignments with questions. These make up the “Reading” category which is worth 10% of the trimester grade.
- Each unit has in-class investigations with required reports. These make up the “Labs” category which is worth 20% of the trimester grade.
- Each unit has daily activities including models, escape rooms, gizmo stations and quizzes. These make up the “Formative Assessment” category which is worth 10% of the trimester grade.
- Each unit has “Summative Assessment” including a culminating engineering project and test worth 60% of the trimester grade.

**OHHS Grading Scale**

**Weighted Categories**

Letter Grade	Percentage	Category	Percentage of overall grade
A	93% and above	Reading	10
A-	90% - 92%	Labs	20
B+	88% - 89%	Formative Assessments	10
B	83% - 87%	Summative Assessments	60
B-	80% - 82%		
C+	78% - 79%		
C	73% - 77%		
C-	70% - 72%		
D+	68% - 69%		
D	60% - 67%		
F	59% and below		

**“Re-Do” Policy is applicable only after a legitimate first effort! After we have negotiated that a rewind is needed the following will guide our efforts.**

1. Daily Work – Some assignments and tasks can be resubmitted for improved score if completed on time.
2. Projects: Circumstances and time of year often dictate the opportunity to improve on a project. We will negotiate this opportunity on an individual basis.
3. All work must be completed by the end of a quarter. Revision of work will not be permitted from one quarter to the next.

### **Extra Help**

All students will be provided opportunities for tutoring after school.

### **OHHS Plagiarism Policy**

Any student who knowingly turns in any work that has been done by someone other than himself or herself, and fraudulently represents it as his/her own, shall be considered to have cheated. Cheating also includes: aiding someone else in cheating, the use or preparation of written, pictorial, or other materials not authorized by the instructor during a test or assignment, the use of testing materials obtained previous to the test date, or plagiarism of any kind. Refer to individual teachers expectations for each class violation. Students found cheating will also be subject to an office referral, which could result in a suspension.

### **Attendance**

Attendance is vital for success in Conceptual Physics class. Students who miss class often miss information, lab work and activities that cannot be made up. As a result students who miss class generally fall behind and their grade suffers.