



# Technical Design

Course Syllabus 2021-2022

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## Course Description

In Technological Design, students will develop the introductory skills used in the world of engineering and design. This class will focus on a number of engineering-based skills, including collaborative problem solving, engineering design and technical sketching through laboratory practical activities. It is to be understood that students will not leave this class as an engineer, however, the incorporation of engineering mathematics and physical and material sciences, with the previously mentioned skills will allow students to emulate the process of producing creative and innovate solutions to challenges engineers are faced with every day.

## Goals for Student Learning

The goals of this course are to meet, in part, the State of Maryland Content Standards for Science and Technology, including:

- Students will develop an understanding of the attributes of design.
- Students will develop an understanding of engineering design.
- Students will develop an understanding of the role of troubleshooting, research and development, invention and innovation, and experimentation in problem solving.
- Students will develop the abilities to apply the design process.

## Textbook and Materials

Protractor

Small 3 ring binder

Pencil/Pen

USB Flash drive

Compass

Ruler

Optional: Colored pencils, erasers, pencil sharpener, Sharpies,

## HCPS Grading Policy

<b>Examples of Product, Process, and Practice</b>		
<b>PRODUCT (50%)</b> <i>Culminating Demonstration of Knowledge</i>	<b>PROCESS (30%)</b> <i>Addressing Specific Short-Term Learning Outcomes</i>	<b>PRACTICE (20%)</b> <i>Building Attitudes, Habits, and Skills</i>
Does it measure how well students achieved specific learning goals, standards, and/or competencies?	Does it provide feedback to students regarding growth towards the attainment of specific learning goals, standards and competencies?	Does it allow students to practice skills and/or reinforce content learning?
<ul style="list-style-type: none"> <li>• Primarily completed in presence of teacher</li> <li>• Rubric aligned to standards</li> <li>• Accuracy graded</li> </ul>	<ul style="list-style-type: none"> <li>• Primarily completed in presence of teacher</li> <li>• Rubric aligned to standards</li> <li>• Accuracy graded</li> </ul>	<ul style="list-style-type: none"> <li>• Graded for completion and participation</li> </ul>

**\*\*Extra credit will not be given for non-academic purposes\*\***

### **Absent Work Policy**

All assignments should be submitted on time. Students will be given the number of class periods equal to the number of lawful class periods absent to turn in completed make up assignments without penalty.

### **Late Work Policy**

All assignments should be submitted on time in order to earn full credit. Any assignment, (*product, process, or practice*) will be allowed to be turned in late for one letter grade deduction from the grade a student earns on the assignment. In order to earn credit for late assignments, students must submit assignments by the end of the day on Wednesday (except for the last week of the quarter) following the designated HAC update. Students are only able to submit assignments that have an established due date within the grading window before the designated HAC update. Assignment that are turned in for late credit will be identified by a footnote in HAC to include a statement about the deduction of a letter grade due to the lateness of the assignment.

Grading Window	Designated HAC Update	Late Work Due Date
September 8- September 24	September 24	September 29
September 27- October 13	October 13	October 20
October 14- October 29	October 29	November 5 (Friday)
November 8- November 19	November 19	November 24
November 22- December 10	December 10	December 15
December 13- January 13	January 13	January 21 (Friday)
January 24- February 11	February 11	February 16
February 14- February 25	February 25	March 2
February 28- March 11	March 11	March 16
March 14- March 25	March 25	March 31 (Thursday)
April 1- April 22	April 22	April 27
April 25- May 6	May 6	May 11
May 11- May 20	May 20	May 25

### **Academic Integrity**

Academic integrity is taking responsibility for the quality and completion of one's own work. Academic dishonesty is taking someone else's work and claiming it as one's own. Students at Bel Air High School are responsible for knowing what is considered to be Academic Dishonesty and the subsequent consequences. More information can be found in the BAHS Student Planner.

## **Classroom Rules and Procedures**

No eating in class  
Be on time  
Be respectful of peers  
Be safe at all times

## **Cell Phone Policy**

- Students will place their cellphones in a teacher designated area as they enter each classroom. Teachers will review with students the specific location for each room. The phones will remain in the teacher designated area unless teachers explicitly tell students to take out the phones for instructional use.
- Cellphones will remain in the teacher designated area during bathroom visits, assemblies and trips to the nurse/counseling office/main office.
- Cellphones will be retrieved from the teacher designated area at the end of class at the direction of the teacher.
- School-appropriate cellphone use is permitted during class changes and lunch. Students are not permitted to make phone calls during school hours.
- If the cell phone policy is violated, it is a referable offense.

## **Office hours in room A101**

2:00pm-2:20pm

**Technical Design**  
**2021-2022 School Year**  
**Parent and Student Contract**

Parent: Please sign showing you have read and understand the class policies and procedures on the previous pages.

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Cell Contact Number: ( ) \_\_\_\_\_ - \_\_\_\_\_

Home Contact Number: ( ) \_\_\_\_\_ - \_\_\_\_\_

E~Mail: \_\_\_\_\_ @ \_\_\_\_\_

E~Mail: \_\_\_\_\_ @ \_\_\_\_\_

Student: I have read and understand the class policies and procedures on the previous pages. I promise to abide by these guidelines and to be diligent in my effort during class.

Print name: \_\_\_\_\_

Signature: \_\_\_\_\_

Your E~Mail: \_\_\_\_\_ @ \_\_\_\_\_

IT IS THE STUDENTS RESPONSIBILITY TO REQUEST ANY MAKE UP WORK.

If you are overwhelmed or are having trouble, talk to me immediately. It is better to approach me for extra help than to wait until work is late or not to do it at all. I am here to help you any way I can.