

# **Problem Solving Through Design 9**

This course teaches students the process of using critical and creative thinking skills when designing to meet specifications.

Students who complete this course will earn credit for both Applied Design, Skills, and Technology 9 and General Fine Arts 9.

Most of the projects in this course are linked to one of the projects in Math 9, Science 9, or can be used as 'evidence' for Humanities 9. This means that for most projects in this course students can earn credit in one of the CORE Grade 9 subjects as well.

### **The Process**

In the Guided Project, students all complete the same project, which also counts as their final Careers 9 project.

Students are guided through the following design stages:

- 1. Identifying the Criteria for Success
- 2. Ideating
- 3. Developing an Action Plan
- 4. Testing, Seeking feedback, and Revising
- 5. Reflecting

Students use this same process to complete all of the projects in the course. The goal is for students to thoroughly understand and use the design process independently by the time they finish this course.

To view the Ministry of Education Learning Outcomes for Applied Design, Skills and Technology, click <a href="here">here</a>.

# **Projects**

The projects in the course include design scenarios from a range of topic areas such as foods, textiles, marketing, music, drama, art. Students use the design process that they learned in the Guided Project to complete their chosen design scenarios. Most of these projects are linked to learning outcomes for the CORE Grade 9 subjects as well. Students may also choose to complete a Depth project in which they pose their own design scenario. This gives students a chance to go deeply into an area of their passion. At the culmination of the Depth project,

students present their learning in a live V-class in the MY Voice *Live Voice* Showcase. Students are required to complete the Guided Website and one other project before they do a Depth project. \*\*Depth projects count as two completed projects in Problem Solving by Design 9.

### **Tech Certificates**

Students may replace the projects in the ADST (Applied Design, Skills, and Technology) section with online training in one or more of the following options (provided they discuss this with their teacher beforehand):

Food Safe Level 1

Coding

**Typing** 

### **Extracurricular Learning**

Students may also use extracurricular experience such as projects from the Robotics and Coding club in MY Voice, Hackathon participation, and other training to replace one or more 'projects' in the course.

#### **Assessment**

Students are required to submit their work to their teachers at several checkpoints during the design process of each project. Teachers will provide feedback at these checkpoints, and students will use the feedback to refine their design process. Only final project submissions are graded.

Guided Project	15%
ADST	30%
Project 1	
Project 2	
Fine Arts	50%
Project 3	
Project 4	
Project 5	
Ticket Out of the Course (Reflection)	5%

### **Suggested Timeline**

<u>Guided Website project</u> – 1 week

There are a total of five projects/Tech certificates to complete in this course, following the Guided Website project.

<u>Projects</u> – 1 month each

Tech Certificates - 1 month each

Students could complete this course within five months.

Remember! Many of these projects also count for work in other CORE Grade 9 courses.

## When students are not meeting the learning outcomes/falling behind

When students fall behind the expected pace or plan, they will be contacted via email or phone and if there is no improvement or response, parents will also be contacted.

Students are expected to let the course teacher know when they are struggling with course content. In response, the course teacher will provide appropriate help or strategies to support learning. The course teacher will also provide feedback on course work to support learning and help students improve. Parents will be made aware if their child is actively working but struggling to meet the learning outcomes of the course.

Students falling behind in a manner where it does not appear that they will complete the course within a year will be sent reminder emails. Without a response or renewed efforts in the course, the student may be assigned an F or withdrawn. Should they begin actively working in the course, the student may be given an alternate completion date.

# **Expectations**

- Contact your teacher when help is needed
- Review and act on feedback from assignments
- Work to complete the course in a timely manner
- Communicate respectfully
- Review weekly progress reports

# Contacting Your Teacher Sean Margison smargison@sdg1.bc.ca

If you would like us to phone you, please email us your phone number and a day and time to call you.

Office Hours: 8:30 am - 3:30 pm. Monday - Friday

If these hours do not work for you, please send us an email, and we can contact you at an alternate time. We are here to support you and your student!! ©