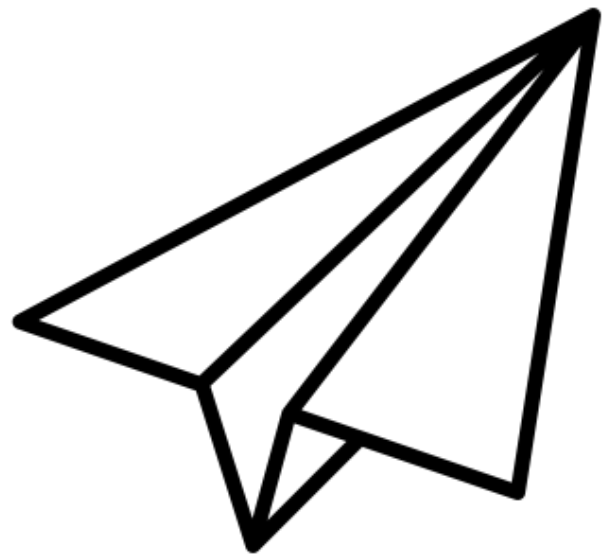


Airplane Activity

Teacher Guide and Resources



Sprett
School of Business
Carleton University

Overview

Working in groups of 4-6, students ideate a unique airplane design for today's airline industry they will pitch to investors. Teams put their creativity to the test designing a paper airplane that can carry a two-loonie payload the required 6m/20ft as a prototype to test before their pitch. If teams land their prototype safely with the two-loonie payload, they'll qualify to pitch their airplane of the future idea to investors. Everyone in the group is involved in the pitch. Teachers can be judges or guests can be invited to participate as judges. Pitches can even be done for the experience without the judging.

Want to extend the activity and make some post-secondary connections? Consider reaching out to Sprott School of Business to see if some Carleton students are available to join your class and judge the pitches. Want to add a bit more of a challenge to the event? Set up client requirements in advance. Teams that ask, can find out more about what the client wants in their new airplane design.

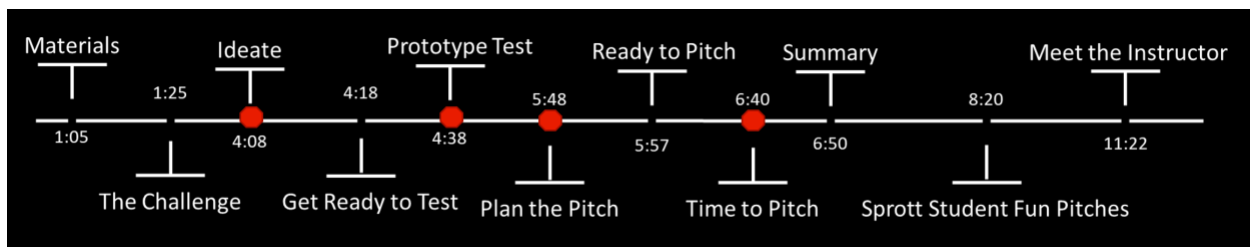
Sprott Outreach: rhonda.kelly@carleton.ca or info@sprott.carleton.ca

The Activity

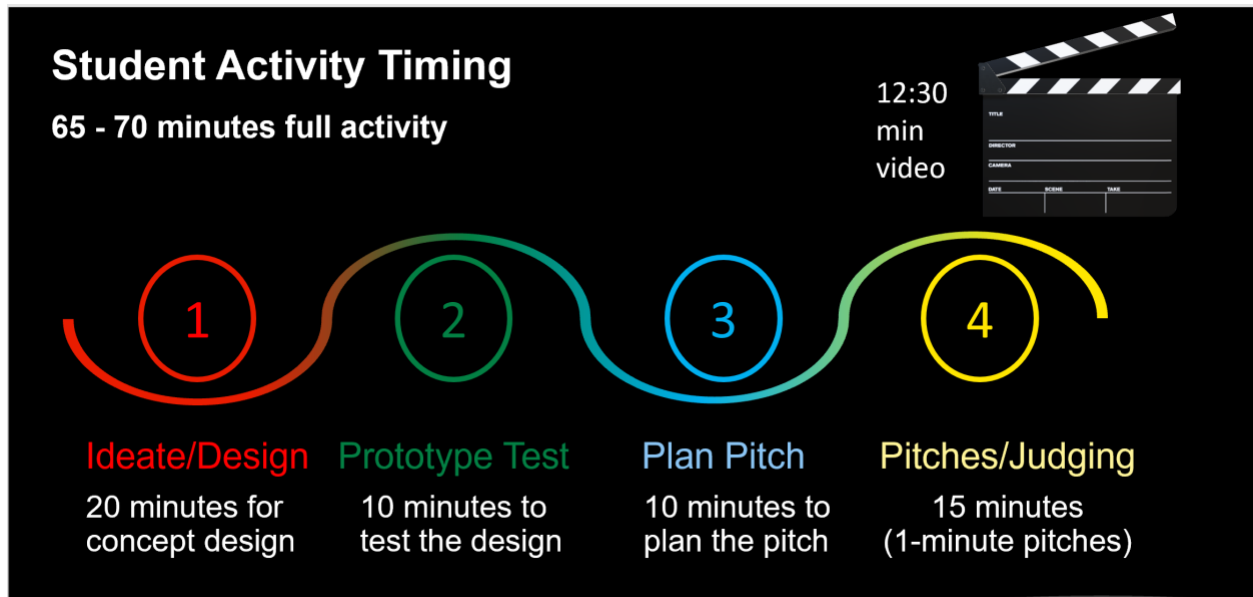
Timing

The activity can be done within a 75-minute class period.

Time Length	Minutes
Full Video	12:30
Video before extras	8:20
Ideate Student Activity	20
Prototype Testing	10
Pitch Planning	10
Pitches/Judging	15



● = Pause for student action.



Materials Needed

Teams of 4-6
 Paper
 2 loonies
 6m/20ft test airstrip
 Scissors (optional)
 Tape (optional)
 Pen/Pencil (optional)

The Video – the video is designed to plug and play, guiding teams through the activity.

<https://vimeo.com/767026481>

Setting up the 6m/20ft airstrip and the groups ahead is a time saver, but this can also be set up easily while teams are in the Ideate stage.

Virtual classes need a bit more advance set-up. Please see the related suggestions for virtual classes.

The Challenge

Working in teams:

- Ideate the best product and service for the airline industry of tomorrow
- Using paper and loonies to create a test prototype that travels 6m/20ft carrying the two-loonie payload landing safely within three attempts
- If the prototype lands safely, teams will move on to pitch their idea for the best product and service for the airline industry of tomorrow

Teams will consider what else the customer would want to:

- Create value
- Deliver value

- Capture value

Breaking down value:

- Functional – does the airplane land safely?
- Emotional – what does this airplane enable the customer to do?
- Societal – how does it respond to societal needs?
- Support the community – how does the airplane support the community?

The Pitch

Prepare a 1-minute pitch for a board of investors.

What's in it for the customer?

What makes your airplane unique?

- Your story
- Your value
- Your solution
- Why your company?

Ready to pitch?

- Show the enthusiasm of the company
- Show the strength of the company
- Show why you as a company will win
- Show the cohesion of the team

Judging

This part of the process can be as informal as groups applauding each group as they present or as formal as a panel of invited judges with specific criteria on a rubric. A simple rubric with three criteria for the judges keeps the focus on ideation.

Rubric Template

Rubric Template: <https://sprott.carleton.ca/wp-content/uploads/Airplane-Activity-Rubric-Templates.xlsx>

Looking for a quick rubric? Templates have been set up with a few options ready to print in the linked spreadsheet. *Note: There are multiple tabs in this document.

For a first time through the activity, consider using the Rubric in the tab “Rubric – Needs Flexible.” This rubric provides room for students to come up with their solutions and define customer needs on their own. If client specifications were not provided during the activity keeping the criteria flexible and focused on customer needs makes sense.

Sprott Student Pitches

The students who helped with the filming of the video had some fun with their own pitches going through the activity. These two fun pitches have been included at the end of the video. Once teams have completed their own pitches, they can have some fun watching what the Sprott students pitched for fun during filming.

Teachers unfamiliar with the pitch process may want to preview these pitches. Sprott "fun" student pitches are featured at the end of the video.

<https://vimeo.com/767026481>

Important: to avoid biasing or limiting creativity and innovation, it's better for teams to see the Sprott Student Fun Pitches after the activity rather than before. It may be tempting to show the pitches in advance to help students understand the pitch process, but the activity focus will not be as effective.

Special thanks to the Sprott students who volunteered their time filming of this video.

Meet the Instructor

A Meet the Instructor segment is included in the video after the activity so students can learn a little bit about the Carleton Instructor Rowland Few who led students through the Airplane Activity in the video.

Special thanks to Rowland Few for making time for the filming of this video activity providing students an opportunity to engage in an experiential Ideation activity.

Transferable Skills

Transferable Skills				
Collaboration	Innovation	Creative thinking	Entrepreneurship	Communication
Critical Thinking	Problem-solving	Presentation	Leadership	Entrepreneurial mindset
Questioning	Seeking a variety of perspectives	Decision-making	Communicating for different audiences	Analysing
Listening	Forming conclusions	Generating ideas	Speaking	Teamwork
Inquiry	Organizing a project	Synthesizing	Viewing	Assessing
Literacy	Planning	Interpreting	Reading	Processing

Video Sections and Timing

Video Section	What Happens	Video Timing	Pause
Materials	Required/Optional Materials Identified	01:05	Long enough to gather required materials
	Pause to gather the materials	01:15	
The Challenge	The challenge is explained	01:25	N/A
Ideate	Pause the video for up to 20 minutes while students ideate	04:08	20 minutes
	<p>Team goals:</p> <p>Have a completed prototype ready to test at the end of this time</p> <p>Have a completed design idea for an airplane for the airplane industry of tomorrow</p>		
Get Ready to Test	Get ready to test – see Sprott students who helped film the video testing their prototypes	04:18	N/A
Prototype Test	Each team has 3 attempts to test their prototype to fly 6m/20ft carrying two loonies	04:38	10 minutes
Pitch Description	Pitches are explained	04:49	N/A
Plan the Pitch	Pause the video for up to 10 minutes for teams to plan their pitches	05:48	10 minutes
	<p>Team goals:</p> <p>Have a prepared pitch ready to present to investors at the end of this time.</p> <p>All team members should be part of the pitch.</p>		
Ready to pitch	Things to remember when pitching	05:57	N/A
Time to Pitch	Pause the video while teams pitch	06:40	10 minutes
Summary	An overview of the activity and the theory of delivering value	06:50	N/A
Sprott Student Fun Pitches	Watch the Sprott students having some fun doing pitches during the filming of the video	08:20	N/A
Meet the Instructor	Meet Rowland Few, the Sprott Entrepreneurship Instructor	11:22	N/A

Client Requirement Suggestions

Adding in client requirements can focus the activity in a more specific direction. Team designs should then respond to specific client needs/wants and requires team members to talk to the customer. It also provides opportunities to connect with certain desired areas of focus. For example, a CGG3O Travel and Tourism class may want to focus on creating an airplane that supports the goal of sustainable tourism.

The following are some ideas for client requirement topics for the airplane of the future:

- More environmentally sustainable
- Safer travel including health and safety protection options
- Barrier free access
- Faster travel
- Easier way of paying for onboard purchases
- Easier/more available communication technology while travelling
- Food options related to current trends
- Food options for dietary restrictions
- Contributes to local employment
- Alternative energy
- Extra space for onboard luggage
- Easier travel with children
- More accessible travel for those with disabilities
- Quiet travel
- Affordable and comfortable workspace while travelling with full internet connectivity
- Group seating options

Integrating Specific Client Requirements into the Activity

Recommendation 1:

Select specific client needs. Allow the teams to send individual representatives from their team to ask the customer questions. The teacher can take on the role of the customer or there can be volunteers who take on this role. The information provided to the team will depend on the questions they ask.

Recommendation 2:

Select specific client needs. Provide these requirements at the beginning of the Ideation stage as minimum client requirements. This process will be particularly useful when connecting back to a specific curriculum learning goal such as environmental sustainability or a particular area of business ethics, for example.

Recommendation 3:

Include Spratt students from Carleton in the activity. Reach out to Spratt to request student volunteers to play the role of client. The students can decide on the client requirements, or they can be determined in advance collaboratively based upon specific course connections. Teams can send individual representatives from their team to ask the customers questions.

Recommendation 4:

Similarly to recommendation 3, volunteers take on the role of the customer. In this case however, different volunteer clients identify a specific client requirement. Teams would have to ask questions of all the volunteer clients to get the full information.

Suggested Ways to Incorporate the Activity

Start the New Semester

The Airplane Activity can be used at the start of a new semester as a fun activity to help students become more comfortable in their environment working with others in the class. It's a simple, kinesthetic, engaging activity, that gets students working together in teams toward a common goal.

The Airplane Activity is an experiential learning activity that provides connections to many transferable skills. Having students work in teams to use their critical thinking skills to solve a problem at the beginning of the year can help students develop work habits integral to their learning regardless of the subject area. The learning outcomes for activity are included in the final segments of the video. Using this activity at the beginning of the year provides a reference example that can be used throughout the semester.

To further extend learning outcomes teachers may choose to add their own extension activities such as a class discussion, a post-it note parking lot, a shared slide deck, or a group Jamboard/Mondomo, for example.

Examples of discussion questions:

- What are your take-aways about working in teams?
- What were the challenges to solving the problem?
- What are your take-aways about creativity in groups?
- What take-aways do you have about individual assertiveness in groups?
- What were the challenges to identifying and solving a customer need?
- What are your take-aways about entrepreneurship?
- What are two take-aways for how to present?
- What questions do you have?

Minds On Activity

Without Specific Client Requirements

The Airplane Activity can work as a Minds On activity to introduce a specific topic in the classroom. For example, many courses have ethics related curriculum expectation. Consider running the activity without prompting client requirements. Make note of “what’s in it for the customer” pitches by the teams. If the pitches connected with the ethics related curriculum the class can discuss those connections and can access prior knowledge. If the pitches did not connect with the ethics related curriculum, then the class can consider why ethics were not included.

For classes like BDI3C Entrepreneurship, this activity can introduce students to Generating Ideas and Identifying Opportunities with the concept of ideation as they move into identifying possible solutions to unsatisfied needs and wants and work through the decision-making process for an idea.

With Specific Client Requirements

Adding specific client requirements can focus idea generation on a specific topic in the classroom by biasing the creative process in that direction. For example, this activity could be used as a Minds On Activity for the Dynamics Unit in Grade 12 Physics or the Forces Unit in Grade 11 Physics.

Practice Collaboration/Teamwork Skills

The Airplane Activity provides an excellent opportunity for students to use their teamwork/collaboration skills. Each part of the activity has a time limit to solve the problem at each stage of the activity which provides an opportunity for students to practice these skills under pressure. Each member of the team is needed to share information, resources, and expertise to solve the problem and make decisions. Responding positively to the ideas, values, and opinions of others throughout the process provides more opportunities for creative solutions. Teams have up to three opportunities to test their paper prototype. Teams pitch one final team idea, and all team members are expected to be part of the pitch. That means they need to build consensus to achieve this group goal while working under pressure.

Collaboration/teamwork skills can be introduced in advance and students can use the Airplane Activity to practice these skills and reflect on their learning by adding in a self-assessment. Alternatively, the activity can be used as a Minds On activity as above.

For courses like BOH4M Business Leadership Management this is also a curriculum connection. It allows students to apply their teamwork skills and experience the stages of team development. It's a fantastic way to connect with factors such as cohesiveness that contribute the success of a team.

Practice Communication Skills

The Airplane Activity provides an opportunity for students to practice communication skills such as effective listening and speaking to communicate for different audiences. These are transferable skills reflected in curriculum outcomes of many courses. An English class, for example, may use this activity to connect with expectations for Listening to Understand and Speaking to Communicate. It's an environment where it's OK to make mistakes and practice. The video segment just prior to testing at 4:18 is a visual example of making mistakes and trying again. The video footage shows the teams testing their earlier prototypes that don't make the distance. The pitch, in particular, can help support students who struggle with presentation strategies. The pitch is short with all team members involved and no real time to practice for polish. It's a chance to get in front of an audience and have some fun without the pressure of an evaluation.

Suggestions for the Virtual Classroom

This activity works in the virtual classroom with excellent feedback from students, but it may take more preparation to set it up. It also means that each group will need a prototype testing location, so the materials needed are a bit different for virtual teams.

Plan for Extra Time:

- Don't be surprised if the activity takes up to two 75-minute periods virtually. It's not the time to complete the stages of the activity, it's the technology and the preparation that can take more time. Things take longer to transition virtually. The testing phase in particular takes longer. The group member testing the prototype might take a few minutes to turn on their camera and then launch the airplane. Some may choose to take a video to share with the class depending on available technology.
- Without giving the teams any different amounts of work time for the different stages of the activity, things may just take longer.

Setting up the groups:

- Consider using groups of six. Larger groups were more effective in the virtual classroom.
- Provide students a list of materials in advance. Be sure each group has at least one person that has all the required materials to test the prototype. Groups may need to be set up based on ensuring each group has the required materials to test the prototype.
 - Measuring tape/rules to measure the testing distance
 - 6m/20ft space where they can throw paper and either turn on a camera in that space to test the prototype live or take a video of the prototype in the testing space to share in the virtual meeting space. Indoor or outdoor spaces are fine, but windy or inclement weather will make using an outdoor space to test the prototype airplane very difficult.
 - Something to mark off the prototype testing distance that won't cause a tripping hazard or damage the space
 - Paper that can fold
 - 2 loonies or 2 toonies
 - Tape (optional)
 - Scissors (optional)
 - Pen/pencil (optional)
 - Consider changing the distance for prototype testing to 10m if groups do enough space for a 20m test flight

Setting up Team Breakout Rooms:

- Set up the virtual meeting spaces so the whole class views the video segments at the same time and then moves into separate meeting rooms to work in teams. This will be set up differently depending on the technology being used. If using a virtual meeting technology that allows for .csv import of assigned groups or pre-assigned breakout rooms, it should be straightforward as long as team members can move in and out of the breakout rooms at the specified times and when they have questions, and the teacher is able to observe the teams in action. Otherwise, it might be easier to set up separate virtual meetings for the teams. Using Google Meets, for example, it was easier for the groups to have individual Meets for each group. A spreadsheet with the group member names and a Meet Lookup for each group allows the teacher to open the group meeting rooms and share the spreadsheet link with the class. From there it's just a matter of students locating their group and clicking on the Meet lookup link. This method of setting up breakout rooms makes it much easier for a teacher to observe the groups as they progress although it is more challenging to manage having multiple virtual meetings open at the same time.

- [Airplane Activity Virtual Team Set-up Template](#)
- A breakout room set-up that allows team members to view the paused video will be helpful. There are prompts for the students where the video is paused

Access to Two Screens

- Having access to two screens makes it much easier monitor groups and play the video with the timings.
- This is particularly helpful if groups make innovative use of their technology. Teachers can observe the groups in action.

Leveraging Technology/Technology Challenges

- Students may choose to leverage the technology at their fingertips in the virtual classroom for this activity. Some creative technology use seen previously in this activity included Jamboards, Word Docs and Google Docs set up in their collaboration space for sharing ideas. Teams designed their airplane of tomorrow in TinkerCad or Google Draw. Pitches were set up in PowerPoint or Slides with a Mindomo mindmap to share the full concept. Some students may not have access to cameras or microphones to be part of the pitch so access to a slide deck for these individuals can provide the technology to ensure they are an active part of the pitch. Students in person have access to paper and pens so shared file options for collaboration can be helpful for student in the virtual world where these physical shared tools aren't available. It will be up to the individual teacher to determine what limits to impose keeping in mind the tight timelines for the challenge.
- Time prompts can be helpful for teams to stay focused on the challenge.
- Teams may experience challenges due to the virtual space. For example, the student with the skills for building paper airplanes may not be the one with the resources needed to do the prototype testing. The problem-solving for this type of challenge can make for some excellent discussion at the end of the activity.

Online Timer

- The video instructions will prompt a pause for the specified timeframe for each stage of the activity. An online timer can be a helpful prompt as teams progress through the stages of the challenge.
- Depending on the breakout room technology being used for the teams, teams may want to set up their own online timer for each stage of the activity.

No Loonies? No problem.

- Each [loonie](#) is approximately 6.27g, 26.5mm diameter and 1.95mm thick. In a pinch, consider substituting with:
 - 2 toonies
 - 3 quarters
 - Jacket buttons
 - Pins/buttons
 - Bottle caps
 - Flat washers

Curriculum Connections

The curriculum connections below have been provided to facilitate learning connections between course learning and the activity. It is by no means an exhaustive list but will hopefully save time in determining if this activity provides added value as an experiential learning activity for specific classes.

Business Courses

Course	Expectations
BB10/20	<p>Economic Basics:</p> <ul style="list-style-type: none"> explain how needs and wants create opportunities for business <p>Management:</p> <ul style="list-style-type: none"> demonstrate business teamwork skills to carry out projects and solve problems <p>Invention and Innovation:</p> <ul style="list-style-type: none"> describe how entrepreneurs discover opportunities in people's needs, wants and problems
BTT10/20	<p>Business Communication Standards:</p> <ul style="list-style-type: none"> use presentation skills when communicating business-related information for specific purposes and audiences
BDI3C	<p>Ideas and Opportunities for New Ventures:</p> <ul style="list-style-type: none"> analyse various methods of generating ideas and identifying opportunities to satisfy needs and wants
BMI3C	<p>Trends in Marketing:</p> <ul style="list-style-type: none"> identify and describe various environmental, ethical, social, and legal issues that affect marketing activities
BDP30	<p>Entrepreneurship and the Enterprising Employee:</p> <ul style="list-style-type: none"> identify and describe the characteristics and contributions of an entrepreneur and the factors affecting successful entrepreneurship <p>Enterprising Skills</p> <ul style="list-style-type: none"> assess the skills of an enterprising employee
BTA30	<p>Business Communications:</p> <ul style="list-style-type: none"> communicate using accepted business standards and formats
BOH4M	<p>Business Communication:</p> <ul style="list-style-type: none"> demonstrate the use of appropriate communication techniques related to business management <p>Leading:</p> <ul style="list-style-type: none"> demonstrate an understanding of group dynamics
BOG4E	<p>The Role of the Manager:</p> <ul style="list-style-type: none"> demonstrate the use of appropriate communication techniques for business manager demonstrate an understanding of intrapreneurship in an organization

[business1112currb.pdf \(gov.on.ca\)](#)

Canadian and World Studies Courses

Course	Expectations
CIC4E Making Personal Economic Choices	<p>Developing Transferable Skills:</p> <ul style="list-style-type: none"> apply in everyday contexts skills developed through economic investigation, and identify some careers in which a background in economics might be an asset <p>Market Fundamentals:</p> <ul style="list-style-type: none"> analyse, with reference to both producers and consumers, how a variety of factors affect markets
CGG3O Travel and Tourism: A Geographic Perspective	<p>Sustainable Tourism and Stewardship:</p> <ul style="list-style-type: none"> analyse strategies for the protection of natural and cultural resources that are essential to tourism, and assess their effectiveness

[THE ONTARIO CURRICULUM, GRADES 11 AND 12 | Canadian and World Studies \(gov.on.ca\)](#)

Career Studies Courses

Course	Expectations
GLC2O Career Studies	<p>Skills, Strategies, and Habits That Contribute to Success:</p> <ul style="list-style-type: none"> demonstrate an understanding of the importance of resilience and perseverance in school, life, and work – why it is helpful to acquire skills for adapting to change, persevering in the face of adversity, learning from mistakes, and thinking positively about setbacks <p>12and analyse how developing resilience and perseverance can help them in all areas of their lives</p> <p>Preparing for Future Opportunities:</p> <ul style="list-style-type: none"> investigate their own interests, values, skills (including transferable skills), strengths, and areas that require further development, documenting their insights in a personal profile

[Career Studies \(revised 2019\) \(gov.on.ca\)](#)

English Courses

Course	Expectations
Included in Oral Communication Strand of 11/12 courses	<p>Listening to Understand:</p> <ul style="list-style-type: none"> listen in order to understand and respond appropriately in a variety of situations for a variety of purposes <p>Speaking to Communicate:</p> <ul style="list-style-type: none"> use speaking skills and strategies appropriately to communicate with different audiences for a variety of purposes

[The Ontario Curriculum, Grades 11 and 12: English, 2007 \(Revised\) \(gov.on.ca\)](#)

Science Courses

Course	Expectations
Included in A1 Expectation of 11/12 courses	<p>Scientific Investigation Skills and Career Exploration:</p> <ul style="list-style-type: none"> demonstrate scientific investigation skills (related to both inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analysing and interpreting, and communicating)
SVN3M Environmental Science	<p>Scientific Solutions to Contemporary Environmental Challenges:</p> <ul style="list-style-type: none"> analyse social and economic issues related to an environmental challenge, and how societal needs influence scientific endeavours related to the environment <p>Conservation of Energy:</p> <ul style="list-style-type: none"> assess the impact on society and the environment of the use of various renewable and non-renewable energy sources, and propose a plan to reduce energy consumption
SVN3E Environmental Science	<p>Energy Conservation:</p> <ul style="list-style-type: none"> demonstrate an understanding of the basic principles of energy production, with reference to both renewable and non-renewable sources, and of various methods of energy conservation <p>The Safe and Environmentally Responsible Workplace:</p> <ul style="list-style-type: none"> demonstrate an understanding of general workplace safety procedures and environmentally responsible practices
SPH3U Physics	<p>Forces:</p> <ul style="list-style-type: none"> demonstrate an understanding of the relationship between changes in velocity and unbalanced forces in one dimension
SPH4U Physics	<p>Dynamics:</p> <ul style="list-style-type: none"> demonstrate an understanding of the forces involved in uniform circular motion and motion in a plane

[The Ontario Curriculum, Grades 11 and 12: Science, 2008 \(revised\) \(gov.on.ca\)](http://www.gov.on.ca)

Technology Courses

Course	Expectations
TGJ3M Communications Technology	<p>Communications Technology Fundamentals:</p> <ul style="list-style-type: none"> demonstrate an understanding of and apply the interpersonal and communication skills necessary to work in a team environment
TGJ3O Communications Technology: Print Broadcast and Print Production	<p>Communications Technology Fundamentals:</p> <ul style="list-style-type: none"> demonstrate an understanding of and apply the interpersonal and communication skills necessary to work in a team environment
TGJ4M Communications Technology	<p>Communications Technology Fundamentals:</p> <ul style="list-style-type: none"> demonstrate an understanding of and apply the interpersonal and communication skills necessary to work in a team environment

Course	Expectations
TGJ4O Communications Technology: Digital Imagery and Web Design	Communications Technology Fundamentals: <ul style="list-style-type: none"> demonstrate an understanding of and apply the interpersonal skills necessary to work effectively with clients and peer
TFJ3C Hospitality and Tourism	Industry Practices, the Environment, and Society: <ul style="list-style-type: none"> demonstrate an understanding of factors that affect the relationship between the tourism industry and the environment
TFJ4C Hospitality and Tourism	Hospitality and Tourism Fundamentals: <ul style="list-style-type: none"> demonstrate an understanding of ways in which the various sectors of the tourism industry accommodate the health and wellness needs and try to protect the health and wellness of their customers Industry Practices, the Environment, and Society: <ul style="list-style-type: none"> demonstrate an understanding of factors that affect the relationship between the tourism industry and the environment demonstrate an understanding of factors that affect the relationship between the tourism industry and society
TMJ3M Manufacturing Engineering	Manufacturing Technology Fundamentals: <ul style="list-style-type: none"> demonstrate an understanding of design and other problem-solving processes used to develop solutions and products in response to challenges in manufacturing technology
TMJ3C Manufacturing Technology	Manufacturing Technology Fundamentals: <ul style="list-style-type: none"> demonstrate an understanding of how a design process is used in the planning and development of a manufacturing project
TDJ3M Technology Design	Technological Design Fundamentals: <ul style="list-style-type: none"> demonstrate an understanding of factors and relationships that affect technological design and the design process Technology, the Environment, and Society: <ul style="list-style-type: none"> demonstrate an understanding of environmentally responsible design practices, and apply them in the technological design process and related activities
TDJ3O Technological Design and the Environment	Technology Design Fundamentals: <ul style="list-style-type: none"> describe the design process, and identify ways in which technological design can address an environmental need or challenge
TDJ4M Technological Design	Technological Design Fundamentals: <ul style="list-style-type: none"> demonstrate an understanding of criteria, relationships, and other factors that affect technological design and the design process
TDJ4O Technological Design in the Twenty-first Century	Technological Design Fundamentals: <ul style="list-style-type: none"> describe the design process and ways in which technological design is influenced by societal needs

[The Ontario Curriculum, Grades 11 and 12: Technological Education, 2009 \(revised\) \(gov.on.ca\)](http://www.gov.on.ca)

Connect With Sprott School of Business Outreach

Sprott Outreach: rhonda.kelly@carleton.ca or info@sprott.carleton.ca

Special Thanks

Thank you to the Sprott students and Carleton Instructor Rowland Few who volunteered their time for the filming of this video.

Resource Links

Grade 9/10 Ontario Business Curriculum
[business910currb.pdf \(gov.on.ca\)](#)

Grade 11/12 Ontario Business Curriculum
[business1112currb.pdf \(gov.on.ca\)](#)

Grade 11/12 Ontario Canadian and World Studies Curriculum
[THE ONTARIO CURRICULUM, GRADES 11 AND 12 | Canadian and World Studies \(gov.on.ca\)](#)

Grade 10 Ontario Career Studies Curriculum
[Career Studies \(revised 2019\) \(gov.on.ca\)](#)

Grade 11/12 Ontario English Curriculum
[The Ontario Curriculum, Grades 11 and 12: English, 2007 \(Revised\) \(gov.on.ca\)](#)

Grade 11/12 Ontario Science Curriculum
[The Ontario Curriculum, Grades 11 and 12: Science, 2008 \(revised\) \(gov.on.ca\)](#)

Grade 11/12 Ontario Technology Curriculum
[The Ontario Curriculum, Grades 11 and 12: Technological Education, 2009 \(revised\) \(gov.on.ca\)](#)

Growing Success
[Growing Success: Assessment, Evaluation and Reporting in Ontario Schools. First Edition, Covering Grades 1 to 12. 2010 \(gov.on.ca\)](#)

Ontario Curriculum Transferable Skills
[Transferable skills \(gov.on.ca\)](#)

Royal Canadian Mint – 1 Dollar
[1 dollar | The Royal Canadian Mint](#)