

## Virtual CTC Course Catalogue 2020

### 1. Course: **Cadet Cyber Training Course - Standard**

Pre-requisites: Nil.

Target Age group: 12-16.

Description: The Cadet Cyber Training Course - Standard will be conducted over the course of 1 week. Training provided will help cadets develop the first level of Cyber skills and will compete in an online competition at the end of the week. Successful participants will also have the opportunity to move onto the Advanced Course.

Timings: There will be a total of 5 instructional sessions. Sessions will be approx. 4 hours. There will also be tutorial hours available should a cadet require extra assistance.

Dates: serial 1: 13-17 Jul and serial 2: 27-31 Jul.

Requirements: Must have internet connection, computer/laptop/tablet and be available on test day. A second monitor will be helpful.

### 2. Course: **Cadet Cyber Training Course - Advanced**

Pre-requisites: Prefer prior knowledge of Cyber Awareness, Programming or have attended the Standard Course.

Target Age group: 12-16.

Description: The Cadet Cyber Training Course - Advanced will be conducted over the course of 1 week. Training provided in this course will help cadets develop the Advanced level of Cyber skills and will compete in an online competition at the end of the week. Successful participants will be considered in representing the Cadet program to compete in CyberTitan/CyberPatriot in the future.

Timings: There will be a total of 5 instructional sessions. Sessions will be approx. 4 hours. There will also be tutorial hours available should a cadet require extra assistance.

Dates: serial 1: 20-24 Jul and serial 2: 3-7 Aug.

Requirements: Must have internet connection, computer/laptop/tablet and be available on test day. A second monitor will be helpful.

### 3. Course: **Backyard FTX**

Pre-requisites: Nil.

Target Age group: 12-15.

Description: The Backyard is a 5-week adventure in the making. Show up weekly for themes and activities in survival, or just for the final overnight activity and challenge yourself to complete all the requirements. Learn how to survive and thrive in your basement, on your balcony or in your backyard.

Timings: There will be a total of 15 instructional sessions. Sessions will be approx. 1.5 hours. There will also be tutorial hours available should a cadet require extra assistance.

Dates: 13 Jul - 14 Aug.

Requirements: Must have Internet connection and computer / laptop / tablet / mobile device. Some small household items may be used in the construction of a survival kit.

#### 4. Course: **Effective Communications**

Pre-requisites: Nil.

Target Age group: 12-16.

Description: Overcome stage fright, crack a joke in front of a group and refine your speech writing skills. Practice your effective communications or challenge your fellow cadets to a speak-off.

Timings: There will be a total of 10 instructional sessions. Sessions will be approx. 1.5 hours. There will also be tutorial hours available should a cadet require extra assistance.

Dates: 13 Jul - 14 Aug.

Requirements: Must have Internet connection and computer / laptop / tablet / mobile device.

#### 5. Course: **Air Operations**

Pre-requisites: Nil.

Target Age group: 12-16

Description: Understand how airports operate and support flying operations. You will also learn about meteorology, weather measuring, navigation and help in NASA research. Guest speakers will inspire cadets to see the full 360 degrees of the flying support environment.

Timings: There will be a total of 10 instructional sessions. Sessions will be approx. 1.5 hours. There will also be tutorial hours available should a cadet require extra assistance.

Dates: serial 1: 13-28 Jul and serial 2: 29 Jul-14 Aug.

Requirements: Must have internet connection, computer/laptop/tablet and be available on test day.

6. Course: **Build and Fly an Airplane Challenge**

Pre-Requisites: Nil.

Target Age group: 12-15

The Build and Fly an Airplane Challenge will occur in 4 tiers, over the course of a 5-week period. Cadets will be encouraged to participate at all tiers of the challenge taking time to improve and re-think the design of their aircraft. Throughout the 5 weeks, cadets will also learn about principles of flight and wing design. Guest speakers will lend their voice to the conversation to encourage cadets throughout the build.

Timings: There will be a total of 10 instructional sessions. Sessions will be approx. 1 hours. There will also be tutorial hours available should a cadet require extra assistance.

Dates: 13 Jul - 14 Aug.

Requirements: Must have Internet connection and computer / laptop / tablet / mobile device and access to paper.

7. Course: **PCOC – Pleasure Craft Operator Competency**

Pre-requisites: Nil.

Target Age Group: 14-16.

The Pleasure Craft Operator Competency Course will be conducted over the course of 2 weeks. Training provided in this course will help cadets develop the knowledge to attempt the Pleasure Craft Operator Competency qualification, which will occur on the last Friday of the 2-week session. Cadets will explore topic areas that include Personal Safety, Rules and Regulation when operating a vessel and Navigation Safety.

Timings: There will be a total of 6 instructional sessions. Sessions will be approx. 1.5 hours. There will also be tutorial hours available should a cadet require extra assistance.

Dates: serial 1: 13-24 Jul and serial 2: 3-14 Aug (one-week gap).

Requirements: Must have internet connection, computer/laptop/tablet and be available on the final day of the course.

8. Course: **Naval Communications**

Pre-requisites: Nil.

Target Age Group: ROC: 12-16.

Description: Participants will have the ability to earn up to three qualifications while participating in the areas of concentration: Radio Operator Certificate (Maritime), International Flags and Phonetic

Alphabet and Communicating using Semaphore. These are standalone courses in which cadets can participate in all 3 or just one and all at once.

### **ROC (M) – Radio Operator Certificate (Maritime)**

Pre-requisites: Recommended PCOC (Pleasure Craft Operator Course)

Description: The Radio Operator Certificate (Maritime) Course will be conducted over the course of 2 weeks. Training provided in this course will help cadets develop the knowledge to attempt the Radio Operator Certificate qualification, which will occur on the last Friday of the 2-week session. Cadets will explore topic areas that include: Identifying Voice Procedures, Utilize Distress, Urgency and Safety Calling Procedures and Describe the Global Maritime Distress and Safety System.

Timings: There will be a total of 6 instructional sessions. Sessions will be approx. 1.5 hours. There will also be tutorial hours available should a cadet require extra assistance.

### **Basic Naval Communications (International Flags and Phonetic Alphabet)**

Description: Basic Naval Communications (International Flags and Phonetic Alphabet) will be conducted in a one-week course. Five courses will be conducted over the course of the summer. Cadets will be provided with all the necessary knowledge to obtain 1 of the communication badges. Cadets will be able to identify each of the international flags, their meaning and recite the phonetic alphabet in preparation for earning the qualification.

Timings: This will be a low facilitation activity in which cadets will self-study with the option of attending tutorial hours to receive assistance.

### **Basic Naval Communications (Communicate using Semaphore)**

Description: Basic Naval Communications (Communicate using Semaphore) will be conducted in a 2-week course. 2 courses will be conducted over the course of the summer. Cadets will be provided with all the necessary knowledge and skill to obtain 1 of the communication badges. Cadets will learn to send and receive messages using Semaphore in preparation for earning the qualification.

Timings: 2 sessions a week will be held each week with the test occurring on the final Friday of the 2-week course. Tutorial hours will also be offered should a cadet need extra assistance. Cadets are able to self-study should they wish.

Dates: serial 1: 13-24 Jul and serial 2: 3-14 Aug (one-week gap) (all three courses are in a serial).

Requirements: For all courses in Naval Communications cadets must have internet connection, computer/laptop/tablet and be available on the final day of the course.

## **9. Course: Knot Challenge**

Pre-requisites: Nil.

Target Age Group: 12-15.

Description: The Knot Challenge will be conducted over the course of 4 weeks. Each week for 4 weeks an activity sheet will be provided to cadets, outlining 6 knots that will be taught over the course of the week. Each week the knots and whippings will become progressively more difficult. Cadets will be encouraged to watch instructional videos and come to tutorial sessions to receive assistance. Each Friday for the duration of the 4 weeks cadets will be invited to attend Show Off Fridays. During Show Off Fridays cadets will be engaged in a Kahoot game and a virtual conversation in which they describe the use of each of the knot and whipping they have learned.

Timings: Each week a tutorial will be held in which cadets are encouraged to come and get assistance if required. Show Off Fridays will be conducted each Friday for an hour.

Dates: 20 Jul - 14 Aug (4-week block).

Requirements: Must have internet connection, computer/laptop or tablet, rope or boot laces, broom handle or poll, whipping twine or dental floss. Cadets are encouraged to use material from around the house.

#### 10. Course: **Build a Boat Challenge**

Pre-Requisites: Nil.

Target Age Group: 12-15.

Description: The Build a Boat Challenge will occur in 4 tiers, over the course of a 5-week period. Cadets will be encouraged to participate at all tiers of the challenge taking time to improve and re-think the design of their boats. Throughout the course of the 5 weeks build a boat challenge, cadets will have the opportunity to participate in lessons around buoyance and ship building which will help in their understanding of how to build a seaworthy boat. Guest speakers will lend their voice to the conversation to encourage cadets throughout the build.

Timings: each week cadets will be required to participate in 1.5 hours of online facilitation with optional lessons and guest speakers.

Dates: 13 Jul - 14 Aug.

Requirements: Must have internet connection, computer/laptop or tablet and be able to build a boat with recycled materials laid out in the build a boat challenge activity sheet.

#### 11. Course: **Music**

Pre-requisites: Basic Music or the level preceding the level you are trying to achieve.

Target Age Group: 12-18.

Description: The music course will provide cadets will the opportunity to be engaged in music training over the course of 5 weeks. Cadets will participate in music theory, rhythm and aural skills, music leadership and history. Cadets will also participate in group and private lessons online with qualified

instructors. At the end of the summer those cadets wishing to take a level test will be provided the opportunity to do so.

Timings: Music staff will provide facilitated training 3 times a week for 1.5 hours. Cadets will also have the opportunity to sign up for individual lessons and attending tutorial session should they wish.

Dates: 13 Jul - 14 Aug.

Requirements: Must have internet connection, computer/laptop/tablet and a musical instrument.

## 12. Course: **Leadership**

Pre-requisites: Nil.

Target Age Group: 15-16.

Description: Cadets will participate in a 5-week module that will walk them through the planning of an activity such as a hike for their family or group of friends. In each of the modules the cadets will explore topic areas such as time management, planning and preparation and risk management. By the end of the 5 weeks cadets would have successfully planned a leadership exercise considering all aspects of a successful activity. Cadets will be able to use these skills to assist their corps and squadron training officers. The modules in this course have been designed to stand alone so cadets will have the opportunity to participate in all of the modules or just the ones that interest them.

Timings: Cadets will have facilitated training 3 times a week for 1.5 hours. Tutorial hours will be held 2 times a week for 1 hour each time.

Dates: 13 Jul - 14 Aug.

Requirements: Must have internet connection, computer/laptop/tablet.

## 13. Course: **Introduction to Drones (Drones Ground School)**

Pre-requisites: Nil.

Target Age Group: Cadets must be 14 years or older to meet the requirements of the Transport Canada exam.

Description: The Introduction to Drones (Drones Ground School) will be conducted over the course of 2.5 weeks. Training provided in this course will help cadets develop the knowledge to attempt the Transport Canada Basic Operators test. Cadets will explore topic areas that include Drone Flight Safety, Rules and Regulations when operating a microdrone.

Timings: There will be a total of 6 instructional sessions. Sessions will be approx. 2 hours. There will also be tutorial hours available should a cadet require extra assistance.

Dates: serial 1: 13-28 Jul and serial 2: 29 Jul-14 Aug.

Requirements: Must have internet connection, computer/laptop/tablet.

14. Course: **Web Programming**

Prerequisite: Nil.

Description: The Web Programming Course will be conducted over the course of 2.5 weeks. Training provided in this course will help cadets develop the skills on simple website development, app development and virtual platforms (Minecraft).

Timings: This will be a low facilitation activity in which cadets will self-study with the option of attending tutorial hours to receive assistance.

Dates: serial 1: 13-28 Jul and serial 2: 29 Jul-14 Aug.

Requirements: Must have internet connection, computer/laptop/tablet.

15. Course: **Fitness & Sport (Fitness)**

Pre-requisites: Nil.

Target Age Group: 12-16.

Description: The Fitness & Sport Course will be conducted over the course of 5 weeks. Training provided in this course will cover aerobics, cardio, flexibility, strength, and personal safety during exercise. Cadets will concurrently participate in the CAF-Physical Activity Tour virtual challenge to track their progress and compare their results across other cadets and member of the DND/CAF community.

Timings: Cadets will have facilitated training 3 times a week for 1-1.5 hours. Tutorial hours will be offered 2 times a week for 30-45 mins each time.

Dates: 13 Jul - 14 Aug.

Requirements: Must have internet connection and access to computer/laptop/tablet.

16. Course: **Fieldcraft Engineering**

Pre-requisites: Nil.

Target Age Group: 12-16.

Description: The Fieldcraft Engineering Course will be conducted over the course of 5 weeks. Training provided in this course will include various knots & lashings and how they can be applied to construct various useful items for field living. Each week will cover a different project including lanyards, tables, benches, and lean-to shelters.

Timings: Cadets will have facilitated training 3 times a week for 1-1.5 hours. Tutorial hours will be offered 2 times a week for 30-45 mins each time.

Dates: 13 Jul - 14 Aug.

Requirements: Must have internet connection, computer/laptop or tablet, rope or boot laces, twine or dental floss, branches / broom sticks / doweling / etc. Cadets are encouraged to use material from around the house to construct their field living items.

#### 17. Course: **GPS Navigation & Geocaching (Geocache)**

Pre-requisites: Nil.

Target Age Group: 13-16.

Description: The GPS Navigation & Geocaching Course will be conducted over the course of 5 weeks. Training provided in this course will cover navigation, GPS usage, safety, and geocaching website resources. This course will involve using a smartphone as a GPS device to navigate to hidden “caches” that are publicly accessible through the sport of Geocache.

Timings: Cadets will have facilitated training 3 times a week for 1-1.5 hours. Tutorial hours will be offered 2 times a week for 30-45 mins each time.

Dates: 13 Jul - 14 Aug.

Requirements: Must have internet connection and access to computer/laptop/tablet and/or smartphone capable of supporting an app.

#### 18. Course: **Build a Rope Bridge Challenge**

Pre-requisites: Nil.

Target Age Group: 12-16.

Description: The Build a Rope Bridge Challenge will be conducted over the course of 5 weeks. Each week an activity sheet will be provided to cadets, outlining the knots & lashings that will be used that week. Each week the build will become progressively more difficult, moving from 1-strand to 2-, and then 3-strand rope bridge models. Cadets will be encouraged to watch instructional videos and come to tutorial sessions to receive assistance. Each Friday cadets will be invited to participate in an on-line Challenge to test the overall design and strength of their model rope bridge.

Timings: Each week a tutorial will be held in which cadets are encouraged to come and get assistance if required. On-Line Challenges will be conducted each Friday for an hour.

Dates: 13 Jul - 14 Aug.

Requirements: Must have internet connection, computer/laptop or tablet, rope or boot laces, chair, twine or dental floss. Cadets are encouraged to use material from around the house to construct their bridges.

19. Course: **Leadership**

Pre-requisites: Nil.

Target Age Group: 15-16.

Description: The Leadership Course will be conducted over the course of 5 weeks. Cadets will participate in 5 modules that will walk them through the planning of a hike for their family or group of friends. In each module, cadets will explore topic areas such as time management, planning and preparation and risk management, culminating in a fully laid-out plan for their own local outing.

Timings: Cadets will have facilitated training 3 times a week for 1-1.5 hours. Tutorial hours will be offered 2 times a week for 30-45 mins each time.

Dates: 13 Jul - 14 Aug.

Requirements: Must have internet connection and access to computer/laptop/tablet.

20. Course: **Virtual Mess Dinner (Customs and Traditions)**

Pre-requisites: Nil.

Target Age Group: 12+.

Description: The Virtual Mess Dinner (Customs and Traditions) Course will be conducted over the course of 2.5 weeks. Training provided in this course will help cadets develop the knowledge of customs and traditions for the CAF (Air, Army and Navy), along with First Nations customs and traditions. The cadets will all participate a Virtual Mess Dinner during the last week of the summer period (Aug 11-14), which will include cadets from across the country and special guests.

Timings: This will be a low facilitation activity in which cadets will self-study with the option of attending tutorial hours to receive assistance. Final Mess Dinner will occur during the week of Aug 11-14.

Dates: 13 Jul - 14 Aug.

Requirements: Must have internet connection, computer/laptop/tablet.

21. Course: **The World of Cadets (Virtual International Cadet Exchange)**

Pre-requisites: Nil.

Target Age Group: 12-16.

Description: The World of Cadets (Virtual International Cadet Exchange) Course will be conducted over the course of 2.5 weeks. Training provided in this course will help cadets see the different cadet programs out in the world and virtually visit, via online tours, the countries or locations where the international cadet programs are.

Timings: This will be a low facilitation activity in which cadets will self-study with the option of attending tutorial hours to receive assistance.

Dates: serial 1: 13-28 Jul and serial 2: 29 Jul-14 Aug.

Requirements: Must have internet connection, computer/laptop/tablet.

## 22. Course: **Citizen Scientists: Northern Explorers**

Pre-requisites: Nil.

Target Age Group: 15-16.

Description: The Citizen Scientists: Northern Explorers Course will be conducted over the course of 5 weeks. Cadets will contribute to the completion of the Canadian Museum of Nature's initiative, "Expedition Arctic Botany", provide reflections on their own experience and their learning as well as discuss impacts (to science and the environment, for Canada, and for themselves and the Cadet Program) of the activity and their participation. We want to challenge the Cadet program (adults and senior cadets) to complete the 13k returns still required.

Timings: Scheduled synchronous sessions = 2 x 1.5 hours per week. Cadets will do independent work outside of the scheduled timing.

Dates: 13 Jul - 14 Aug.

Requirements: internet connectivity and Laptop/computer/tablet.

## 23. Course: **Cadet Correspondent Training**

Pre-requisite: Nil.

Target Age Group: 14-17.

Description: The Cadet Correspondent Workshop is a 5-session course where you learn the basics of Public Affairs. The modules include how to connect with local media, effectively use social media, and become a storyteller at your corps or sqn.

Timings: There will 5 sessions taught over a two-week period, in person instruction will be approx. 1.5 hours on specified training days.

Dates: serial 1 (English): 13-24 Jul; serial 2 (French): 20-31 Jul and serial 3 (English): 3-14 Aug.

Requirements: Must have an internet connection, a computer, and something to take photos with (phone, camera, or laptop).