



COURSE OUTLINE: ATQ112 - NAV & WTHR FNDMNTLS

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Approved: Greg Farish, Dean, Aviation

Course Code: Title	ATQ112: NAVIGATION AND WEATHER FUNDAMENTALS
Program Number: Name	4061: AVIATION TECHNOLOGY 4161: AVIATION TECHNIQUES
Department:	AVIATION TECHNOLOGY
Academic Year:	2024-2025
Course Description:	This course will introduce the principles of aeronautical navigation and equip individuals with the skills to interpret aviation weather reports, forecasts, and associated symbols. It's designed for those aspiring to careers in aviation and the air transportation system.
Total Credits:	3
Hours/Week:	2
Total Hours:	30
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
This course is a pre-requisite for:	AFT120, AVF111, AVF122
Vocational Learning Outcomes (VLO's) addressed in this course:	4161 - AVIATION TECHNIQUES VLO 2 Perform basic techniques and standard practices used in aviation in order to increase skill level to enter next phase of learning and practice about aviation flight and industry. VLO 8 Develop effective learning and study skills to support success in the current program of study and advancement into subsequent, higher level, studies in Aviation.
Essential Employability Skills (EES) addressed in this course:	EES 3 Execute mathematical operations accurately. EES 4 Apply a systematic approach to solve problems. EES 5 Use a variety of thinking skills to anticipate and solve problems.
Course Evaluation:	Passing Grade: 70%, B A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Other Course Evaluation & Assessment Requirements:	To be excused from class due to illness or other unforeseen circumstances, students must email the faculty member before the start of class. Students may request a deferment of a test for compassionate reasons, including but not limited to the death of an immediate family member, personal illness, or a recent diagnosis of a serious illness in a family member. Make-ups will not be permitted after the fact for compassionate reasons. Test dates will be announced at least one week in advance. If a faculty member determines that a student is at



risk of not succeeding academically and has exhausted all available strategies, the student's contact information may be confidentially provided to Student Services to offer additional support. Any student wishing to restrict the sharing of their information should inform the coordinator or faculty member.

Books and Required Resources:

From The Ground Up
 Publisher: Aviation Publishers Co. Ltd. Edition: 29th or higher
 ISBN: 987-0-9730036-3-5

Chart
 AIR5001 Sault Ste Marie VNC (VFR Navigation Chart)

Plotting Instruments
 Douglas Protractor, ICAO ruler, flight computer

Royal Canadian Air Force Weather Manual by 1 Canadian Air Division
 Publisher: 17 Wint Publishing Office
 ISBN: 987-0-660-20260-0
 Library and Archives Canada Cataloguing in Publication

Royal Canadian Air Force Weather Workbook

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
Apply basic navigation concepts.	By the end of this course, students will have a solid understanding of basic navigation concepts, including the velocity equation, latitude and longitude, directional orientation, measuring and plotting tracks, and accurately interpreting the VFR Navigation Chart.
Course Outcome 2	Learning Objectives for Course Outcome 2
Applying dead reckoning techniques.	By the end of this course, students will be proficient in applying dead reckoning techniques for effective navigation.
Course Outcome 3	Learning Objectives for Course Outcome 3
Interpret and apply aviation weather reports and forecasts.	By the end of this course, students will be able to accurately interpret and apply aviation reports and forecasts to enhance flight planning and operational decision-making.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Meteorology section test	30%
Navigation section test	30%
Quizzes	40%

Date:

August 22, 2024

Addendum:

Please refer to the course outline addendum on the Learning Management System for further information.

