



COURSE OUTLINE: AVT257 - GENERAL KNOWLEDGE

Prepared: Ryan London

Approved: Greg Farish, Chair, Aviation Technology - Flight

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| Course Code: Title | AVT257: GENERAL KNOWLEDGE FOR AVIATION |
| Program Number: Name | 4061: AVIATION TECHNOLOGY |
| Department: | AVIATION TECHNOLOGY |
| Semesters/Terms: | 21W |
| Course Description: | This course expands on the general knowledge of theory, aerodynamics, engines, airframes and instruments with a quantitative analysis and greater depth. Other topics relate to formulae and performance charts dealing with weight and balance, cruise performance, multi-engine operations, unusual attitudes, recognition of system failures and emergency procedures. |
| Total Credits: | 1 |
| Hours/Week: | 1 |
| Total Hours: | 15 |
| Prerequisites: | AFT120, AVF241, AVF242, AVF245, AVT248 |
| Corequisites: | There are no co-requisites for this course. |
| This course is a pre-requisite for: | AFT360, AVT361, AVT363, AVT364, AVT366, AVT369 |
| Essential Employability Skills (EES) addressed in this course: | <p>EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</p> <p>EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>EES 3 Execute mathematical operations accurately.</p> <p>EES 4 Apply a systematic approach to solve problems.</p> <p>EES 5 Use a variety of thinking skills to anticipate and solve problems.</p> <p>EES 6 Locate, select, organize, and document information using appropriate technology and information systems.</p> <p>EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.</p> <p>EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.</p> <p>EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</p> <p>EES 10 Manage the use of time and other resources to complete projects.</p> <p>EES 11 Take responsibility for ones own actions, decisions, and consequences.</p> |
| Course Evaluation: | Passing Grade: 70%, B A minimum program GPA of 2.0 or higher where program specific standards exist is required |

In response to public health requirements pertaining to the COVID19 pandemic, course delivery and assessment traditionally delivered in-class, may occur remotely either in whole or in part in the 2020-2021 academic year.



SAULT COLLEGE | 443 NORTHERN AVENUE | SAULT STE. MARIE, ON P6B 4J3, CANADA | 705-759-2554

for graduation.

Other Course Evaluation & Assessment Requirements:

The student will be assessed by a combination of attendance and department, quizzes, tests and a final exam. Weighting of each will be as follows: 30% for quizzes, 30% for all tests prior to the final exam and 40% for the final exam. A minimum mark of 70% (B) is required to pass the course.

Unexcused absences will result in 2% deduction of the final mark for each occurrence, arriving for class late will result in a 1% deduction of the final mark for each occurrence, and violations of the dress code will result in a 1% deduction of the final mark for each occurrence. Refer to the Sault College Aviation Standard Operating Procedures (SOP's) Section 10 for dress code policies and SOP Section 4 for policy regarding absence from classes.

Quizzes will be given without prior notice.

Students may request a deferment of a test for compassionate reasons. Compassionate Grounds for deferment will include but not be limited to death of an immediate family member, personal illness, or recent diagnosis of a serious illness of a family member. Make-ups will not be permitted after the fact for compassionate reasons.

A classroom code of conduct can be found in the Sault College Student Code of Conduct, on the Sault College Website. This along with the list of Unacceptable Behaviours in the SOP will be adhered to.

Attendance is mandatory for all Aviation classes unless approval is granted in advance. In the case of illness, a phone call, voice mail or e-mail message is expected before class.

If a student expects to be late or will be delayed for any reason, every attempt should be made to contact the professor, or leave a message on voice mail or e-mail.

Although attitude, co-operation, etc., are not graded, students may be terminated based on their performance in this area (see section 5.2 SOP). These attributes are also considered in the selection of the Air Canada Award and other scholarships.

Dates of tests will be announced at least 1 week in advance.

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

Books and Required Resources:

AERONAUTICAL INFORMATION MANUAL
Publisher: TRANSPORT CANADA Edition: 2017-1-March 30, 2017
ISBN: 1715-7382/TP 14371E

CARs CANADIAN AVIATION REGULATIONS

FROM THE GROUND UP
Publisher: AVIATION PUBLISHERS CO. LIMITED
ISBN: 0973003634

Course Outcomes and Learning Objectives:

| Course Outcome 1 | Learning Objectives for Course Outcome 1 |
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| | <p>Upon successful completion of this course, the student will have obtained:</p> <ol style="list-style-type: none"> 1. An in depth knowledge of engine mechanisms, airframe design and ancillary controls 2. An appreciation of how power and airframe design influence aerodynamic performance 3. The safety concerns in the use of industry standard performance charts 4. Demonstrate analytical skills to solve aircraft performance | <p>As a result of completing the outcomes of the course the student will be</p> <ol style="list-style-type: none"> 1. Apply technical skills toward improved aircraft performance 2. Recognize technical irregularities and take appropriate action |
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Evaluation Process and Grading System:

| Evaluation Type | Evaluation Weight |
|-----------------|-------------------|
| FINAL EXAM | 40% |
| MIDTERM | 30% |
| QUIZZES | 30% |

Date: June 11, 2020

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

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