SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Basic Aerodynamics

CODE NO.: AVT124 Semester: Two

PROGRAM: Aviation Technology (Flight)

AUTHOR: John Portas MBA, MPA

Extension 2518 Room B1230

Microsoft Outlook - john.portas@saultcollege.ca Primary Channel of Communication - WebCT/LMS

DATE: Jan.1, 2008 PREVIOUS OUTLINE DATED: New

APPROVED:

CHAIR DATE

TOTAL CREDITS: 1

PREREQUISITE(S): N/A

HOURS/WEEK: 1

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For additional information, please contact Brian Punch,

The School of The Natural Environment, Technology & Skilled Trades (705) 759-2554, Ext. 2681

I. COURSE DESCRIPTION:

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

- 1. Make basic calculations of lift, drag and power
- 2. Appreciate the design structures of aircraft for efficiency
- 3. Understand the problems with transonic and supersonic speeds
- 4. Understand the performance of aircraft unusual attitudes

III. TOPICS:

- 1. Various theories of lift.
- 2. Lift, drag and power curve relationships.
- 3. Stability.
- 4. Sub-sonic and supersonic flight.
- 5. Propeller, turboprop and turbojet theory.
- 6. Performance

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

From The Ground Up Handout Notes

V. EVALUATION PROCESS/GRADING SYSTEM:

<give breakdown of tests/assignments and their weights relative to
calculating the final grade for the course>

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	Grade Point Equivalent
A+ A	90 – 100% 80 – 89%	4.00
В	70 - 79%	3.00
С	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded	

subject area.

X A temporary grade limited to situations

with extenuating circumstances giving a student additional time to complete the

requirements for a course.

NR Grade not reported to Registrar's office.
W Student has withdrawn from the course

without academic penalty.

VI. SPECIAL NOTES:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 703 so that support services can be arranged for you.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct*. Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources. Substitute course information is available in the Registrar's office.

<include any other special notes appropriate to your course>

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.