



AVIA100: Introduction to Aviation

Course Outline: Section – 001 / Winter

1. Course Information:

1.1 Class Location and Time:

Room: TBD

Lectures: Monday 12:30-2:20pm

Tutorials: Wednesday 12:30-1:20pm or Wednesday 1:30-2:20pm

1.2 Contact Information:

Instructor: Dr. Suzanne Kearns

Office: EV1-238

Office Hours: Mondays 10:00-12:00

Phone: x32789

Email: suzanne.kearns@uwaterloo.ca

2. Course Description:

This course incorporates a survey of topic areas that impact the aviation industry in Canada. Key areas include aviation history, civil and military aviation, human factors, airspace and air traffic control systems, airport management, and aviation safety. The nature and impact of each of these topics is explored through a combination of lecture, class discussion and activities, and student presentations.

2 hours lecture and 1 hour tutorial, 0.5 course

3. Textbook & Additional Expense

3.1 Textbook: There is no **required** text for this course. Readings and workbook exercises will be distributed through Learn, as will the lecture slides used in class.

3.2 Additional Expense: To complete the 'Aviation Outreach Presentation' element of the course you will be required to visit a local school and deliver a presentation. You will be responsible for making your own transportation arrangements to and from the school (an estimated cost for transportation is \$20). Note: an alternate assignment is available (see section 5.3).

4. Objectives and Format

4.1 Learning objectives

Through an interdisciplinary focus, with emphasis on teamwork and professional approaches, successful students will:

- Demonstrate their understanding of key elements critical to the aviation industry in Canada and Internationally. Describe a range of professional and safety issues, give examples of domestic and international regulatory and lab our issues, and examining environmental concerns associated with aviation.

- Collaborate with team members and develop public speaking skills by delivering a community-service learning presentation to young students.

4.2 Course format

The course will be organized as a combination of lecture and tutorial session. The lectures will incorporate a presentation made by the instructor along with several guest speakers from industry. The tutorials will incorporate group discussion, activities, and preparation of student presentations.

5. Evaluation

5.1 Tutorial Activities (10%) & Participation (10%): A crucial element of this course is the sharing of ideas and opinions. Since each of us brings a unique background of experiences, much can be learned from debate and discussion. Tutorial sessions will give you the opportunity to further explore subject matter that was presented in the lecture within activities. Your work on tutorial activities will be graded and valued at 10% of your overall grade in the course. When you attend tutorial sessions, attendance will be taken and this will your participation grade which is worth 10% of your overall grade in the course.

5.2 Midterm Examination (20%): A midterm examination will be given in class mid-semester (see Lecture Schedule later in this Outline). The midterm exam will cover all information that has been presented in the course up until the midterm date, including readings, lectures, videos, examples, etc. Therefore, it is crucial that you take good notes throughout the term and complete all assigned readings. The exam format may include multiple choice, fill-in-the-blanks, short answer, and/or essay questions. Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

5.3 Aviation Outreach Presentation (20%): As the international aviation industry is experiencing a time of unprecedented growth, the International Civil Aviation Organization (ICAO) has made outreach a global priority. ICAO's group is called the Next Generation of Aviation Professionals (NGAP) and the goal is to educate the general public (from 5-6 year olds up to adults) about opportunities within aviation. You will be participating in this initiative by forming a small group with your classmates and delivering a 30-minute presentation to school children. You will be responsible for forming your group, although the instructor will assist if there are any problems. The group element of this assignment is important as it facilitates teamwork, communication, decision-making, and leadership skills – all of which are related to the learning outcomes of this course.

The classes and grade levels of the groups you will be delivering the presentations to will be provided to you (only limited choice of age-group will be available). It will be your group's responsibility to professionally communicate with the classroom teacher, understand how the aviation presentation can align with their curriculum, plan and create a 30-minute presentation that describes an area of aviation, and at an agreed-upon time with the classroom teacher travel to a local school and deliver the presentation to young students (*you are responsible for your own transportation arrangements). Your grade on this assignment will be based 50/50 on 1) the classroom teacher's evaluation of your presentation, preparation, and communication and 2) Dr. Kearns evaluation of your presentation which you will present during tutorial time at the end of term.

This presentation is intended to help you develop teamwork, presentation, professional communication, and outreach skills. Additional instruction and guidance will be provided in tutorial sessions. Although preparations for the presentation will be ongoing throughout the semester, the presentations must be made in-schools during the last two weeks of March, 2017. Any conflicts among group members should be brought forward to the instructor. If conflicts result in disproportionate workload among group members, the group will meet with the instructor at the end of term to assess each member's workload and resolve the conflict.

**Alternate Assignment* – Participation in the Aviation Outreach Presentation is voluntary. For students who are unable or unwilling to participate in the Presentation, an individual alternate assignment is available. Students choosing this option are required to choose an age group (5-8, 9-12, 13-18) and produce aviation outreach materials that target this demographic. These materials include a 10-page paper and a 7-10-minute video presentation. Your 10-page paper must analyze your target demographic, describe aviation

professional opportunities, and the educational/training requirements for the profession. The paper is expected to be properly referenced and use APA formatting. The 7-10-minute video presentation must be a lesson that targets a key topic in educating that demographic about an aspect of aviation. The video can be as simple or complex as you choose – it is the content that is important rather than the style or editing. The paper (worth 10% of your grade in the course) and video (worth 10% of your grade in the course) are both due on March 20, 2017.

5.4 Final Examination (40%): A comprehensive final examination will be given at the end of the semester. A final exam review will be given prior to the exam. The final exam will cover all information in the course, including presentation, lectures, videos, tutorial activities, etc. Therefore, it is crucial that you take good notes throughout the term and complete all assigned workbook activities. The exam format may include multiple choice, fill-in-the-blanks, short answer, and/or essay questions. Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Evaluation Item	Percentage of Course Grade
5.1 Tutorial Activities & Participation	20%
5.2 Midterm Examination	20%
5.3 Aviation Outreach Presentation	20%
5.4 Final Examination	40%

Exams are in multiple choice and fill-in-the-blank format. Each exam, in total, will be scheduled for 2 hours and are closed book examinations. Dictionaries are NOT allowed into the examinations.

Students are responsible for material covered in the lectures as well as the content discussed within the tutorial sessions. The midterm exam will be held during class time. The final exam will be scheduled during the exam period at the end of the semester. Exams will not be returned to students but may be reviewed in the instructor's office, by appointment.

Students are *required to complete all components* of this course. Extra assignments to improve grades *will not* be allowed.

Exams will be scored electronically and examined for unusual coincidences in the pattern of answers given which may be indicative and used as supporting evidence of cheating.

All communication with students must be through either the student's University of Waterloo email account or via Learn. If a student emails the instructor or TA from a personal account, they will be requested to resend the email using their personal University of Waterloo email account.

Assignments are due on dates indicated. Last assignments are penalized 10% every 24-hours.

Grades will not be adjusted on the basis of need. It is important to monitor your performance in the course. Remember: *You* are responsible for your grades in this course.

6. Lecture Schedule

Week Lecture – Mondays 12:30-2:20pm

Tutorials every Wednesday

1 January 9, 2017

***NO TUTORIALS JANUARY 4th**

**Course Introduction, Overview of Syllabus,
Expectations of Professionalism**

- | | | |
|----|--|--|
| 2 | January 16, 2017
Civil Aerospace Sector | |
| 3 | January 23, 2017
International Air Law | |
| 4 | January 30, 2017
Civil Aviation Sector | |
| 5 | February 6, 2017
Global Air Navigation | |
| 6 | February 13, 2017
Airports | |
| 7 | <u>February 27, 2017 – Mid-Term Exam</u> | <i>*Mid-term exam held during regularly scheduled class time and class room</i> |
| 8 | March 6, 2017 –
Security | |
| 9 | March 13, 2017 –
Weather and Environmental Impacts | |
| 10 | March 20, 2017 –
Accident Statistics and Investigation | <i>*Outreach presentations must be made during the last two weeks of March. Students are responsible for arranging the presentation time and content with the assigned school teacher.</i> |
| 11 | March 27, 2017 –
Human Factors and Safety Management Systems | |
| 12 | April 3, 2017 –
Remotely Piloted Aircraft Systems (drones) | |

7. University Policies Related to Assignments, Tests, and Final Exams

Academic Integrity:

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. The University's guiding principles on academic integrity can be found here: <http://uwaterloo.ca/academicintegrity/>

Students are strongly encouraged to review the material provided by the university's Academic Integrity office specifically for students: <http://uwaterloo.ca/academicintegrity/Students/index.html>

Students are also expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for their actions. Students who are unsure whether an action constitutes an offense, or who need help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. Students may also complete the following tutorial: <https://uwaterloo.ca/library/get-assignment-and-research-help/academic-integrity/academic-integrity-tutorial>

When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline, <https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-71> Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy #70, Student Grievance: <https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-70>

Note for students with disabilities: AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.

Mental Health: The University of Waterloo considers students' well-being to be extremely important. We recognize that throughout the term students may face health challenges - physical and / or emotional. **Please note that help is available.** Mental health is a serious issue for everyone and can affect your ability to do your best work. Counselling Services <http://www.uwaterloo.ca/counselling-services> is an inclusive, non-judgmental, and confidential space for anyone to seek support. They offer confidential counselling for a variety of areas including anxiety, stress management, depression, grief, substance use, sexuality, relationship issues, and much more.

Religious Observances: Student needs to inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See Policy 70 - Student Petitions and Grievances, Section 4, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt please contact your Undergraduate Advisor for details.

Appeals: A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 – (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm

Unclaimed assignments: Unclaimed assignments will be retained until one month after term grades become official in quest. After that time, they will be destroyed in compliance with UW's confidential shredding procedures.

Recording lectures: Use of recording devices during lectures is only allowed with explicit permission of the instructor of the course.

Research Ethics: The University of Waterloo requires all research conducted by its students, staff, and faculty which involves humans as participants to undergo prior ethics review and clearance through the Director, Office of Human Research and Animal Care (Office). The ethics review and clearance processes are intended to ensure that projects comply with the Office's Guidelines for Research with Human Participants (Guidelines) as well as those of provincial and federal agencies, and that the safety, rights and welfare of participants are adequately protected. The Guidelines inform researchers about ethical issues and procedures which are of concern when conducting research with humans (e.g. confidentiality, risks and benefits, informed consent process, etc.). If the development of your research proposal consists of research that involves humans as participants, the please contact the course instructor for guidance and see <https://uwaterloo.ca/research/office-research-ethics>

Turnitin: Text matching software (Turnitin®) will be used to screen assignments in this course. This is being done to verify that use of all materials and sources in assignments is documented. To better understand the meaning of 'similarity' in Turnitin, see https://guides.turnitin.com/01_Manuals_and_Guides/Student/Classic_Student_User_Guide/17_Similarity_Check#Viewing_an_Originality_Report. Students will be given an option if they do not want to have their assignment screened by Turnitin®. In the first week of the term, details will be provided about arrangements and alternatives for the use of Turnitin® in this course.

Co-op interviews and class attendance:

Co-op students are encouraged to try and choose interview time slots that result in the least amount of disruption to class schedules. When this is challenging, or not possible, a student may miss a portion of a class meeting for an interview. Instructors are asked for leniency in these situations; but, a co-op interview does not relieve the student of any requirements associated with that class meeting.

When a co-op interview conflicts with an in-class evaluation mechanism (e.g., test, quiz, presentation, critique), class attendance takes precedence and the onus is on the student to reschedule the interview. CECA provides an interview conflict procedure to manage these situations.

Students will be required to provide copies of their interview schedules (they may be printed from JobMine) should there be a need to verify class absence due to co-op interviews.

Important Dates:

January 3, 2017 Winter Session classes begin.

January 16, 2017 Last day to add a course

January 23, 2017 Last day to withdraw from a course with 100% tuition refund

February 8, 2017 Final exam schedules released

February 20, 2017 Family Day

February 21, 2017 Deadline for 50% tuition refund

February 20-24, 2017 Study Days

March 17, 2017 Last day to withdraw from a course and receive WD (withdrew) grade

March 18, 2017 From this day on, WF (withdrew/failure) grade assigned to dropped courses

April 3, 2017 Winter Session classes end.

April 4-6, 2017 Study Days

April 7-25, 2017 April examination period

8. Other Information

- Bring student identification to exams.
- Nothing is to be on/at one's desk during an exam except a pencil, an eraser, and the individual's student card
- Do not wear baseball caps to exams
- Do not bring music players, cell phones, beepers, or other electronic devices to exams

9. FREQUENTLY ASKED QUESTIONS

Question	Answer
How can I succeed in this course?	Attend class and tutorials, complete homework, focus on understanding the principles in a way that lets you apply them to new situations.
When will the exam grades be posted?	Grades are posted on Learn when they become available.
Can I come and see my exam?	You can review your exam during office hours or at any other mutually convenient time.
There is so much material. How can I possibly remember everything?	You do not need to remember everything. You need to understand the fundamental principles and how to apply them.
This mark is going to prevent me from getting accepted into graduate school/NASA.	Grades are given based on actual performance, as set out on the course outline. In order to be fair to all the students in the course, grade adjustments, extra assignments, and the reweighting of course components are not available.
I need a certain mark to get or maintain a scholarship.	
I tried really hard but I still got a poor mark.	

