

# Syllabus

## ASEN 3046 Introduction to Humans in Aviation

Fri 17:00-19:50

This course investigates manned aviation and how it has impacted our lives.

We begin by reviewing the history of manned aviation in 1783 with the Montgolfier s and proceed through the major historic events that have advanced aircraft developments. We consider how each new historic milestone in aircraft development has impacted society and our acceptance of manned flight.

Students will gain an understanding of just how rapidly aviation has developed over the last century and how challenging it has been to adapt our psychological and physiological limitations to such dangerous environment. We will do this by looking at aviation accidents from the position of human error.

We then explore the socio-economic impacts of recent aviation related events such as the post 9-11 air travel fallout, the Katrina recovery and rescue efforts and the Icelandic Volcano. We will also discuss the future of aviation and how it will affect our lives.

**Instructor:** Hank Scott, Lecturer/Instructor

Email: [hank.scott@colorado.edu](mailto:hank.scott@colorado.edu)

**Prerequisites:** *none*, open to all majors at any level

### Textbooks:

**1. Flight the Complete History** By R.G. Grant, DK Publishing (2007). **ISBN-10:** 0756619025

**OR Flight: 100 Years of Aviation** By R.G Grant DK Publishing (2007) **ISBN-10:** 0756653460

(Pretty much the same book)

**2. Handbook of Aviation Human Factors, 2<sup>nd</sup> Edition** (Human Factors in Transportation)

Wise, Hopkins and Garland (*hardcover 2009*).

*Digital Copy is fine for this book... CU library has digital copies:*

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Please note that you may bring laptops, E-readers, tablets or smartphones to the 2 exams to read the electronic versions of the text books.

### Grading Breakdown:

Section 1 Exam 20%

Mid-Term Paper (2000 words) 30%, (papers will be submitted in Canvas Dropbox)

Section 2 Exam 20%

Group Presentation 30%

**Course Website:** on Canvas

**Required Readings:**

Textbooks listed above for Sections 1 and 2.

Various articles provided in class and available on the course website will be utilized during Sections 2 and 3.

**Lecture Topics:**

**1. History of Manned Flight**

The Invention of Aviation

Early successes and failures

Wright Brothers

The Early Novelty of Aviation, and WWI

The Golden Age: Aviation finds a purpose: mail, combat and commercial transportation.

WWII

Post-war R&D, the Cold War, Airlines and the Jet Age

The Private Aviation phenomenon

Historical review of civilian acceptance of Aviation

**2. Flight Safety and Human Error**

## **Aerospace Engineering Sciences & University Policies**

### **Classroom Behavior**

Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. For more information, see the policies on [classroom behavior](#) and the [Student Conduct & Conflict Resolution policies](#).

### **Requirements for COVID-19**

As a matter of public health and safety due to the pandemic, all members of the CU Boulder community and all visitors to campus must follow university, department and building requirements and all public health orders in place to reduce the risk of spreading infectious disease. Students who fail to adhere to these requirements will be asked to leave class, and students who do not leave class when asked or who refuse to comply with these requirements will be referred to [Student Conduct and Conflict Resolution](#). For more information, see the policy on [classroom behavior](#) and the [Student Code of Conduct](#). If you require accommodation because a disability prevents you from fulfilling these safety measures, please follow the steps in the

As of Aug. 13, 2021, CU Boulder has returned to requiring masks in classrooms and laboratories regardless of vaccination status. This requirement is a temporary precaution during the delta surge

-19 vaccine requirement. Exemptions include individuals who cannot medically tolerate a face covering, as well as those who are hearing-impaired or otherwise disabled or who are communicating with someone who is hearing-impaired or otherwise disabled and where the ability to see the mouth is essential to communication. If you qualify for a mask-related accommodation, please follow the steps in the

instructed instructional faculty who are engaged in an indoor instructional activity and are separated by at least 6 feet from the nearest person are exempt from wearing masks if they so choose.

Students who have tested positive for COVID-19, have symptoms of COVID-19, or have had close contact with someone who has tested positive for or had symptoms of COVID-19 must stay home. In this class, if you are sick or quarantined, email me.

### **Accommodation for Disabilities**

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the [Disability Services website](#). Contact Disability Services at 303-492-8671 or [dsinfo@colorado.edu](mailto:dsinfo@colorado.edu) for further assistance. If you have a temporary medical condition, see [Temporary Medical Conditions](#) on the Disability Services website.

### **Preferred Student Names and Pronouns**

CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those

preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

## **Honor Code**

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code academic integrity policy. Violations of the Honor Code may include, but are not limited to: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code ([honor@colorado.edu](mailto:honor@colorado.edu); 303-492-5550). Students found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found on the [Honor Code website](#).

## **Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation**

The University of Colorado Boulder (CU Boulder) is committed to fostering an inclusive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, or protected-class discrimination or harassment by or against members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or email [cureport@colorado.edu](mailto:cureport@colorado.edu). Information about OIEC, university policies, [reporting options](#), and the campus resources can be found on the [OIEC website](#).

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