

DEPARTMENT OF BIOLOGICAL SCIENCES

HUMAN FACTORS IN THE AVIATION ENVIRONMENT
AVIATION/BIOLOGY 141 Fall 2016

Course Instructor: David K. Wood

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Course Description:

Human factors in the Aviation Environment is an upper division course designed to introduce students to the Human Factors that contribute to the failures of the man-machine interface leading to aviation mishaps and incidents. The purpose of reviewing these factors is to prevent future occurrences thereby increasing safety.

Course Objectives:

The objectives of this course are to provide:

1. Aviation students with an overview of the various human elements involved with the aviation environment and industry as well as methods of coping with problems and stresses;
2. Students of other disciplines with an understanding of these aviation problems, and the analogs to their everyday lives, so they might be able to study and develop new coping methods;
3. An environment for idea exchange and discourse of all disciplines.

Reading and Text Assignments:

The assigned text is Human Factors in Flight, Frank H. Hawkins, 1st or 2nd Edition. A course schedule and assigned readings for the next class meeting are supplied in class. Please read the assignments before the appropriate class. It will greatly enhance your understanding of the lecture and make your studying much easier. Many lectures are unrelated and, generally, outside of the experience range of the typical student. Pre-reading will allow you to understand the nuances of lectures. Students will be chosen at random to answer questions in class. BE PREPARED!

Testing and Grading:

Two examinations will be given. Tests may comprise multiple choice, true/false, matching, short or long essay questions. Essay only exams are possible and bluebooks should be brought to all exams. Scantron exams are likely and students should be prepared with Scantron Form 882, 50 questions per side, choices A through E. Information concerning the format of the tests will be presented in class prior to each exam. Pertinent testable material will come from reading material, homework assignments, and lectures. Only #2 Pencils are allowed for tests, no electronic devices

(PDA, cell phones, electronic dictionaries, calculators) will be permitted during quizzes or tests. Each test will count 40%; a writing assignment will constitute 10%; in class verbal or written quizzes, participation and leadership constitute the remaining 10%.

To provide you with a general guide to grade distribution, it has been my experience that an overall percentage of approximately 90+ is an A, 80+ is a B, 70+ is a C, etc. Final exam schedule is as published in the front of the catalog.

Exam Make Up Policy:

Students will be allowed to take a lecture exam late only under unusual and extreme documented circumstances such as debilitating illness or a family emergency. Make up exams may be oral or written at the instructors' discretion and must be made up as soon as possible. It is the students' responsibility to notify the instructors as soon as possible prior to the exam or at the soonest practical opportunity at the above phone number of the need to miss an exam.

Cheating Policy:

Students should read the "Policy on Academic Dishonesty" in the University Catalog. Exams will be proctored closely. If anyone is suspected of cheating, their exam will be compared to the exams of neighboring students. Students who have obviously cheated or attempted to cheat will be invited to the instructor's office for a discussion after the test. This includes students who allow others to copy off their exams. Depending on the severity of the infraction and the strength of the evidence, several options will be considered. Students will be informed of any action taken against them and will be urged to appeal if they feel falsely accused. Plagiarism will also be handled seriously.

Extra Credit:

Since the purpose of the course is to increase safety, personally we can all accomplish this by being certified in life saving skills. Therefore, you are strongly encouraged to obtain basic First Aid and Cardio-Pulmonary Resuscitation (FA/CPR) instruction. Consideration has been given as extra curricular work. Final grades will be credited an additional 5% out of 100% for each successful certification in either CPR or First Aid for a total of 10% out of 100% for both certifications., i.e., a B average (86%) will result in a final grade of A (96%), or a C+ (78%) will result in a B (88%). Proof of current certification is required. Certification must be completed, and all documentation turned in, on the last day of regularly scheduled class.

Dropping Class:

University and Department guidelines require a serious and compelling reason to drop a course. Grades alone or unsatisfactory performance does not constitute a sufficient reason to drop a course (See University Catalog).