



Introduction to Human Factors Psychology Psychology 461 Spring 2013



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Course Description and Objectives

Human Factors is a specialization of psychology that studies how humans interact with systems and technology, and how those interactions may be made better (e.g., safe, efficient, easy to learn, intuitive, enjoyable, etc.). Human Factors psychologists conduct research and work at companies that produce technology, but they also work for media companies, medical device manufacturers, and in the design of automobiles and other forms of transportation. This course is designed to teach you about all of these areas of Human Factors Psychology, and give you some practice with human factors techniques, by presenting information on three 'core' topics: (1) the history and development of Human Factors, (2) the cognitive psychology and attributes of humans, and (3) an introduction to product evaluation.

Last Day to Add: Jan. 29-----Last Day to Drop: Feb. 22-----Selective Withdrawal: Feb. 25-Mar. 29

Course Structure and Reading Assignments

Before you decide to continue in this course, there are two considerations that should be made. First, Human Factors is interdisciplinary in nature, and because of this, we will be reading from a variety of original sources (and not a textbook). Reading will include experimental articles on psychology, book chapters, industry guides, historical and contemporary interactive products for evaluation, etc. Reading original material (which is typically free) keep costs down for students, and allows me to select reading assignments that are as interesting, relevant, and on the cutting-edge of science as possible.

Second, this course will require your active participation. I will expect the class to discuss issues, and I frequently call on students in class. There will be activities completed both inside and outside of class. These activities provide experience learning about and applying human factors principles and research methodology to the analysis and evaluation of contemporary human factors problems. Without a standard textbook to guide you, this course may be different than some of the others you have taken. It is not designed to be more difficult, but it will require much of students by way of reading, discussion, and some time outside of class working on projects. Please see me immediately if you have concerns about continuing with the class because of the course workload or structure.

Course Assignments and Grading

Examinations

Examinations will measure students' mastery of the material covered in the textbook and class lectures using a format of my choosing. Exams may include multiple-choice, drawing, matching, fill-in-the-blank, short or long essay questions, hangman, crosswords puzzles, and so on. There will be three regular exams, and a fourth comprehensive final exam (see final exam information below). All four exams are worth 40 points, and the lowest exam will be dropped, for a total of 120 exam points. Please bring something to write with on exam days, but no other materials are required (i.e., I do not use Scantrons).

NOTE: The grade for an unexcused missed exam will be a 0. Makeup exams will be given only when a student gains prior approval to take a makeup exam, or when he or she provides university-approved documentation clearly indicating that circumstances beyond the student's control (e.g., a serious illness, serious automotive accident with documentation, death in the family, or other GMU-approved absence).

Quizzes

Quizzes motivate students to attend class, arrive on time, and complete the assigned readings. Quizzes cover material from that day's reading assignment(s). Throughout the semester, I will administer quizzes at the beginning of class. If you are absent from class or arrive late after the quiz, you will not be allowed to take the quiz and will receive no points. Students can accumulate 70 quiz points during the semester.

Human Factors Projects

In addition to reading and thinking about the concepts covered in the text, an important part of the learning process includes applying these concepts. Thus, you will complete three human-factors projects outside the class. Projects will be worth 20 points, for a total of 60 project points during the semester.

Final Exam

The final exam will be given at a time scheduled by the university. It will be formatted like the other exams, but will cover material from the entire semester. The final exam is worth 40 points, but as with the other exams, the final exam grade can be dropped if it becomes a student's lowest exam grade.

Bonus Points or Extra Credit

No extra credit will be given in this course unless otherwise announced. Students who are performing poorly in the class are encouraged to see me during office hours to discuss how they may improve their performance on exams, quizzes, or projects, but no bonus points or extra credit points are available.

Computing Your Final Grade

Your letter grade will be calculated by dividing the number of points you earn by the total number of points possible (250 points). Where there are fractions of a point determining the difference between letter grades, I will round to the nearest whole number. Please do not approach me about bending the class rules to make personal exceptions about your grade: I take fair and equitable treatment of all students seriously and every student will be subject to the same grading standards outlined below. The chart below should be useful for determining your course standings:

<u>Point Source</u>	<u>Maximum Score</u>	<u>Determining Your Letter Grade</u>	
Exam	40 points	A+	100-97% 241-250 (or above) points
Exam	40 Points	A	96-93% 231-240 points
Exam*	40 points	A-	92-90% 224-230 points
Quizzes	70 points	B+	89-87% 216-223 points
Projects	60 points	B	86-83% 207-215 points
		B-	82-80% 200-206 points
		C+	79-77% 192-199 points
		C	76-73% 182-191 points
		C-	72-70% 175-181 points
		D+	69-67% 167-174 points
		D	66-60% 150-166 points
		F	59% or below 150 points or below
Total: 250 points			

*Note that one exam (or the final) will be dropped.

Attendance

Attendance is required in all lecture sessions without exception. I will routinely take attendance at my discretion using formal roll calls, attendance quizzes, or simply by noticing that you are not in class. As a courtesy, I allow two unexcused absences per semester. After two absences, you will incur a penalty of a reduction in your overall course grade of half a letter for each further unexcused absence (e.g., a student who earns a grade of “A-” and who misses three classes would receive a grade of “B+,” a “C-” would become a “D,” etc.).

If you miss class, you must make arrangements with me in advance or provide university-approved documentation of an unexcused absence to make up all assignments. No graded assignments will be accepted late, nor will make up work be allowed, in the event of missed quizzes, homework, or exams for unexcused absences. Unless otherwise arranged in advance, missed assignments must be made up within one week of returning from a university-excused absence.

Please do not arrive late to class. Being late disrupts other students who are on time, may cause you to miss quizzes, and also risks being counted absent (see attendance policy above). Students who miss quizzes or other materials because of lateness will not be given the opportunity to make up the work and will be treated as absent.

GMU Honor Code

George Mason University has an Honor Code that each student accepts as a condition of enrollment. This code is consistent with APA’s ethical principles for working professionals, and it is required that each student adhere to the Honor Code. For this course, group studying is expected and encouraged, but all students are required to produce original work on all assignments unless otherwise noted. Plagiarism, academic dishonesty, and other failures to follow the GMU honor code will result in disciplinary actions that include receiving a failing grade for this course, along with referral to the GMU Honor Committee for further review and documentation of the offense. A lack of knowledge about what constitutes a violation of the honor code is not a defense against possible violations; it is your responsibility to review and adhere to this code. If you have ANY questions about plagiarism or the honor code, I encourage students to review the code for themselves at: <http://academicintegrity.gmu.edu/honorcode/>

Performing at Your Best

Learning Accommodations: It is my policy, as well as the university’s, to accommodate all students with disabilities that might affect their learning, course participation, or assignment completion. If you are a student with a disability and you need academic accommodations, please feel free to speak with me about making appropriate accommodations and contact the Disability Resource Center (DRC) at 703-993-2474, or online at <http://ods.gmu.edu/> - accommodations will be arranged through that office.

Stress and Academics: Let’s face it, being a student can be stressful, and life events can create anxiety or depression that can hurt anybody’s academic performance. GMU is committed to helping students maintain their emotional well-being through the GMU Counseling and Psychological Services (CAPS) office, located online at: <http://caps.gmu.edu/> and by telephone at: 703-993-2380. CAPS services are free to Mason students, and include one-on-one stress and anxiety counseling, and Academic Skills Workshops that can teach students how to ‘study smarter’ and make the most of your higher education.

Improving Academic Writing: Strong writing is a skill that is learned through guided instruction and practice. Strong writing skills are likely to be a benefit for students pursuing academic or industry careers in most domains. Students who seek to improve their academic writing are encouraged to do so by visiting the GMU Writing Center. Information can be found online at: <http://writingcenter.gmu.edu/>
