

# Industrial Engineering 340/Psychology 358: Human Factors

University of Illinois at Urbana-Champaign  
Department of Industrial and Enterprise Systems Engineering  
Spring 2021

## Course Description

Introduction to human factors and ergonomics, covering topics of human information processing, physiological and biomechanical functioning, and implications for design of the workplace and jobs in that workplace. The field of Human Factors and Ergonomics (HFE) is interdisciplinary, with applications wherever humans interact with equipment in a system context. Examples will be drawn from manufacturing, medicine, aerospace, ground transportation, and computer interaction. Students will learn an overview of HFE principles and understand how they fit into engineering design and analysis. Typical design and operational problems in work domains, as well as their HFE solutions, will be highlighted. Students will apply HFE principles to design problems. Also, the course will seek to improve the teamwork, written and oral presentation skills of each student.

**Credits:** 4

## Schedule:

Lectures: Mondays and Wednesdays, 8:30-9:50 a.m.,  
Zoom (see below for full information) – if possible, please have your video on, so as to create some feeling of community  
<https://illinois.zoom.us/j/82617414386?pwd=SmlUZ0ZwUjB0WTRVYlFSMEZFYVnJQT09>

Meeting ID: 826 1741 4386  
Password: 715336

Laboratories: Thursdays, either 9-9:50, 10-10:50 or 11-11:50 a.m.,  
Zoom (same meeting details as class meetings) – if possible, please have your video on, so as to create some feeling of community  
<https://illinois.zoom.us/j/82617414386?pwd=SmlUZ0ZwUjB0WTRVYlFSMEZFYVnJQT09>

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## Instructor:

Dr. Abigail R. Wooldridge  
Office: 209A Transportation Building  
Lab: 2311/2313 DCL  
Email: [arwool@illinois.edu](mailto:arwool@illinois.edu)  
Phone: 217-300-8086  
Office Hours: Mondays and Wednesdays, 10-11 a.m., or by appointment (schedule at <https://calendly.com/arwool>)  
Zoom (see below for full information) – if possible, please have video on  
<https://illinois.zoom.us/j/87656292168?pwd=Mkl2WEZNSUtkYXVFWm5LekJkYmZBU09>

Meeting ID: 876 5629 2168  
Password: 327995

**Teaching Assistants:**

Sondria Cottrell

Email: [bcottre2@illinois.edu](mailto:bcottre2@illinois.edu)

Office Hours: Fridays, 1-3 p.m.

Zoom (same as Dr. Wooldridge's office hours) – if possible, please have video on <https://illinois.zoom.us/j/87656292168?pwd=Mkl2WEZNSUtKYXVFWm5LekJkYmZBU T09>

Meeting ID: 876 5629 2168

Password: 327995

Carolina Leite

Email: [leite2@illinois.edu](mailto:leite2@illinois.edu)

**Course Goals:**

1. Demonstrate the relevance and importance of human factors and ergonomics in society and industry.
2. Increase your interest and awareness of human factors and ergonomic issues in and outside of work.
3. Illustrate how to recognize and identify human factors and ergonomics problems.
4. Provide you with basic concepts, tools and methods to solve these problems.

**Course Outcomes:**

1. Identify ergonomic problems.
2. Use ergonomic tables in ergonomic problem solving.
3. Use basic biomechanical formulas to analyze ergonomic problems.
4. Use basic cognitive ergonomics concepts and formulas in solving ergonomic problems.
5. Use basic physiological concepts to analyze ergonomic problems.
6. Use anthropometric data in design.
7. Use organizational (macro) ergonomics concepts and theories to analyze ergonomics problems.
8. Prepare ergonomics analysis reports.

**Course Prerequisites:**

PSYC 100, PSYC 103 (not necessary, updating system), or consent of instructor.

**Textbook:**

"Designing for People: An Introduction to Human Factors Engineering"

(3rd edition, August 31, 2017)

Editors: J. D. Lee, C. D. Wickens, Y. Liu, and L. N. Boyle.

Publisher: CreateSpace Independent Publishing Platform

ISBN-10: 1539808009; ISBN-13: 978-1539808008

**Compass:** <https://compass2g.illinois.edu>

Course materials such as syllabus, handouts, notes, assignment instructions, lecture recordings, etc. can be found on the Compass 2g Learning management system course website at <https://compass2g.illinois.edu>. You are responsible for regularly checking the course site as well as your email and compass messages to learn of any updates.

**Note: Class material is copyright to the University of Illinois at Urbana-Champaign and should not be distributed or disseminated.**

**GradeScope:** <https://gradescope.com>

We will be using Gradescope this term, which allows us to provide fast and accurate feedback on your work. Assignments will be submitted and grades returned via Gradescope unless otherwise specified.

**NOTE: This makes a few extra steps at the time that you turn your work in.** Do not wait until the last minute to submit.

Your Gradescope login is your university email, and your password can be changed at [https://gradescope.com/reset\\_password](https://gradescope.com/reset_password). The same link can be used if you need to set your password for the first time.

Link to <https://gradescope.com> (Links to an external site.)

Helpful hints on submission: [submitting\\_hw\\_guide.pdf](#) (Links to an external site.)

Link to Getting started guide: [https://gradescope.com/get\\_started](https://gradescope.com/get_started) (Links to an external site.)

How to submit homework video: [https://gradescope.com/get\\_started#student-submission](https://gradescope.com/get_started#student-submission) (Links to an external site.)

Turning in homework requires that you scan in your work, or produce a pdf. There are many scanning apps for your phone that will produce an excellent scanned image. gradescope.com recommends: Scannable from Evernote OR Genius Scan.

**FOR BEST RESULTS PLEASE USE: SCANNABLE from evernote (FREE). Available in app store for iOS or android.** <https://evernote.com/products/scannable> (Links to an external site.)

As soon as grades are posted, you will be notified immediately so that you can log in and see your feedback

## Zoom Information

### Lecture and Lab:

Join Zoom Meeting

<https://illinois.zoom.us/j/82617414386?pwd=SmlUZ0ZwUjB0WTRVYlFSMEZFYVNJQT09>

Meeting ID: 826 1741 4386

Password: 715336

One tap mobile

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+17866351003,,82617414386# US (Miami)

Dial by your location

+1 312 626 6799 US (Chicago)

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+1 929 205 6099 US (New York)

+1 267 831 0333 US (Philadelphia)

+1 301 715 8592 US (Washington

D.C)

+1 470 250 9358 US (Atlanta)

+1 470 381 2552 US (Atlanta)

+1 646 518 9805 US (New York)

+1 651 372 8299 US (Minnesota)

+1 720 928 9299 US (Denver)

+1 971 247 1195 US (Portland)

+1 213 338 8477 US (Los Angeles)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 602 753 0140 US (Phoenix)

+1 669 219 2599 US (San Jose)

+1 669 900 6833 US (San Jose)

+1 778 907 2071 Canada

+1 438 809 7799 Canada

+1 587 328 1099 Canada

+1 647 374 4685 Canada

+1 647 558 0588 Canada

+49 695 050 2596 Germany

+49 69 7104 9922 Germany

+49 30 5679 5800 Germany

+82 2 6022 2322 Korea, Republic of

+82 2 6105 4111 Korea, Republic of

+44 203 481 5237 United Kingdom

+44 203 481 5240 United Kingdom

+44 131 460 1196 United Kingdom

+44 203 051 2874 United Kingdom

+81 3 4578 1488 Japan

+81 524 564 439 Japan

+61 3 7018 2005 Australia

+61 8 7150 1149 Australia

+61 2 8015 6011 Australia  
+52 229 910 0061 Mexico  
+52 554 161 4288 Mexico  
+65 3158 7288 Singapore  
+65 3165 1065 Singapore  
Meeting ID: 826 1741 4386  
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Find your local number:  
<https://illinois.zoom.us/j/82617414386>

Join by SIP  
82617414386@zoomcrc.com

Join by H.323

Join by Skype for Business  
<https://illinois.zoom.us/skype/82617414386>

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162.255.36.11 (US East)  
221.122.88.195 (China)  
115.114.131.7 (India Mumbai)  
115.114.115.7 (India Hyderabad)  
213.19.144.110 (Amsterdam Netherlands)  
213.244.140.110 (Germany)  
103.122.166.55 (Australia)  
209.9.211.110 (Hong Kong SAR)  
64.211.144.160 (Brazil)  
69.174.57.160 (Canada)  
207.226.132.110 (Japan)  
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**Office Hours:**

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+1 929 205 6099 US (New York)  
+1 213 338 8477 US (Los Angeles)  
+1 253 215 8782 US (Tacoma)  
+1 346 248 7799 US (Houston)  
+1 602 753 0140 US (Phoenix)  
+1 669 219 2599 US (San Jose)  
+1 669 900 6833 US (San Jose)  
+1 720 928 9299 US (Denver)  
+1 971 247 1195 US (Portland)  
+1 647 374 4685 Canada  
+1 647 558 0588 Canada  
+1 778 907 2071 Canada  
+1 438 809 7799 Canada

+1 587 328 1099 Canada  
+49 30 5679 5800 Germany  
+49 695 050 2596 Germany  
+49 69 7104 9922 Germany  
+82 2 6022 2322 Korea, Republic of  
+82 2 6105 4111 Korea, Republic of  
+44 131 460 1196 United Kingdom  
+44 203 051 2874 United Kingdom  
+44 203 481 5237 United Kingdom  
+44 203 481 5240 United Kingdom  
+81 3 4578 1488 Japan  
+81 524 564 439 Japan  
+61 2 8015 6011 Australia  
+61 3 7018 2005 Australia  
+61 8 7150 1149 Australia  
+52 229 910 0061 Mexico  
+52 554 161 4288 Mexico  
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### Grading Scale: Straight (i.e., no +/-)

90% and up: A      80% - 89%: B      70% - 79%: C      60% - 69%: D      below 59%: F

### Grade Determination

- 25% Quizzes: One quiz/week, except the week of the midterm and the last week, for 13 in the semester. Your grade is based on the top 10 (lowest 3 are dropped) - each one kept is 2.5% of your final grade.
- Labs: Lab meetings are each week – you are expected to attend!
  - 6% Individual labs: The lab in weeks 1, 2, and 14 are completed individually. Each is worth 2% of your final grade.
  - 20% Team labs: There are five labs that will be completed in teams assigned by the instructor. For each of these labs, you will have one week to get and review the assignment and begin working on it, followed by a second week dedicated for your team to work on writing up your findings in a full laboratory report (template and rubric will be provided). Lab reports are due via GradeScope on the weekly due date in the second week (i.e., Friday at 11:59 p.m.). Each lab report is 4% of your final grade.
- 10% Exam 1
- 10% Exam 2
- 2% Student bio – based on turning in your student bio by 12pm Thursday of the first week.
- 2% come to my office hours during the first three weeks of class (slots of 5 minutes will be available during regularly scheduled office hours plus extra time to accommodate students as needed).
- 20% Project – 5-page maximum written report and poster presentation equally weighted (each component worth 10%). Additional details below with more to be provided.
- 5% Team contribution – determined by averaging results of two peer evaluations performed by your colleagues on your lab and project team.

### Project:

Projects are to be done in teams, assigned by instructor. The project will be one of your own design. However, the project topic and design must be approved by the instructor. Deadline for topic approval and more details will be announced at a later date. Expectations are that the project is representative of the knowledge, tools, and techniques obtained in this course. To govern these criteria, each report should be done as if it was to be submitted to the Human Factors and Ergonomics Society (HFES) conference. The project has two components:

1. **Written report:** Reports will be written as a technical document using proper spelling and grammar (i.e. technical writing). The structure will be done in *HFES Annual Meeting paper* format. Reports should

be typed and formatted in style of conference of submission. The report will be worth 50% of the total project points.

2. **Posters presentations:** The last two days of class will be presentations (half of the class will go on the Monday, half on Wednesday – each half should bring their posters to their respective day). Poster sessions will be given in a gallery format. Poster presenters will field questions from faculty, staff, and students.
3. **Electronic copies of both the written report and the poster are due by the beginning of the last Monday of class.**

#### Extra Credit:

You can earn 0.5 extra credit point (to be added on to your final grade, i.e., worth 0.5% extra) by coming to my or Sondria's office hours any week other than the first three weeks to *have a conversation* (can be about this course, it could be about HFE in a broader sense, career advice, life advice, etc.). This can be repeated each week, before the last day of class, for a total of 6 extra credit points over the course of the semester. Other opportunities for extra credit may be announced throughout the semester.

#### Summary of Grade Determination

Item	Points out of Maximum Points	
Quizzes	Sum of top 10 scores	out of 25 points
Individual Labs	Sum of scores	out of 6 points
Team Labs	Sum of scores	out of 20 points
Exam 1	Score	out of 10 points
Exam 2	Score	out of 10 points
Student Bio Survey	2 points	out of 2 points
Office Hours Visit	2 points	out of 2 points
Project	Score	out of 20 points
Team Contribution	Score	out of 5 points
<i>Extra Credit (optional)</i>	<i>Extra credit points will be available over the course of the semester as described above; additional opportunities may be announced during class</i>	
Final Grade	Summation of all of the above, out of 100 points (i.e., it works just like a percentage – look at the scale above for letter grades)	

#### COVID-19 Principles and Considerations

- We did not sign up for COVID-19 or the pandemic and the way it has upended our lives. We also did not prefer an online course. That said, I will do everything I can to support your success and learning without asking you to put your health in jeopardy.
- Take care of yourself and your needs (and that of your family) first – this class is not a life or death situation and I will be flexible. Please let me know if you need something from me that can make things easier (especially for this class, but generally in case I know about resources for you).
- I will prioritize supporting you, sharing all resources with you early and often, and communicating expectations and opportunities clearly.
- It helps me do the above better if you communicate with me! I will be sending you a weekly check in to share feedback about how materials are being delivered in this class and others – please respond so we can improve together. It will be a google form – I'll post the link on Compass each Monday.
- I will remain flexible throughout the semester. Simply ask for an appointment with me to discuss what I can do to contribute to your well-being in the class.
- Please stay kind, flexible, and supportive to the people around you, too. It might not feel that way due to social distancing, but we are all in it together.
- The following resources or programs may be useful to you – please use them if you need!

#### Technology Loan Program

Visit the COVID-19 Technology Loaner Program page for technology loan information. <https://answers.uillinois.edu/illinois/99680>

The Technology Loan Program is a partnership established across the campus IT community to loan technology hardware to eligible students who have unmet needs. This includes the loaning of computers, peripherals, and internet hotspot technologies to support online learning and work-from-home activities for the duration of the COVID-19 crisis. Here is a website about the kind of technology the college of engineering is recommended and some more information:

<https://it.engineering.illinois.edu/services-support-students/essential-technology-students>

### Student Assistance Center

If a student does not have access to functional computers or internet connectivity, they can contact the Student Assistance Center at 217-333-0050 or [helpdean@illinois.edu](mailto:helpdean@illinois.edu). The Center serves as the first point of contact for students who contact the Office of the Dean of Students. The Assistant Deans help students understand university policies and procedures, educate them about and connect them to campus resources, and support students in crisis. <https://odos.illinois.edu/community-of-care/student-assistance-center/#utilize>

### Email policy

Please check the syllabus and Compass2g before asking questions. When sending an email, observe the following rules or professionalism:

- Title the email “**IE340 – (subject of your email)**” in the subject line. This prevents your email from going to the junk folder.
- Maintain [professional etiquette](#), including a respectful greeting, and clear, polite body of the email.
- Frame your question clearly and professionally. Include all relevant information about what you need up front.
- Email in advance. Allow 48 business hours for a response.

### Expectations for course meetings

- Participate in class discussions, contribute individual experiences when relevant to the topic so that others can benefit and learn
- Ask questions...there is no bad question if you learned something from the response
- Maturity and respect for others is mandatory (see statement on diversity).
- Cell Phones should be turned off at the beginning of class unless you are emergency personnel on-call. Activation or use of a cell phone will be penalized.
- Use other electronic devices (tablets, laptops, etc.) for course-related purposes only. Do not bring any electronic devices to exams.
- Take individual responsibility for completing assignments on time.
- Check e-mail and Compass frequently (just not in class)
- All readings should be completed prior to class (except for first day, but those need to be done before the first lab).
- Partial lecture notes will be available in the “Lectures” tab prior to class. I recommend you bring them (printed or otherwise) to help you take notes and fill in blanks.
- Class begins and ends on time. Arriving late or leaving early may result in missed points on the exercise.

### Absences and make up/late assignments

- Attendance and participation are expected as part of the course. Missing a class will result missing any available points for that period. Make up points are rarely granted, due to dropping the 3 lowest quiz grades and large amount of extra credit; to receive makeup points, you must:
  - Provide appropriate documentation from the Office of the Dean of Students;



- Read all assigned materials;
- Watch the recording of the lecture;
- Speak with another student about in-class discussion and activities;
- Prepare a 2 page report addressing key points in the readings and lecture, which must be emailed to me within 1 week of the class absence.
- Make-up for examinations and presentations must have absence letter from the Office of the Dean of Students (<https://odos.illinois.edu/community-of-care/resources/students/absence-letters/>).

### Regrade Requests

Any request for a regrade must be made within one week (7 days) from grading. We will review the grading for the entire assignment, not only the question/item you request.

Before requesting a regrade, please prepare a clear and concise argument for your stance by reading carefully the comments we provide on your work and consider their meaning and what you feel was wrong in the graded work.

Examples of good regrade requests include

- The TA said I left Problem 4 blank, but I have Problem 4 right here, and they just didn't see it.
- The TA said this solution was wrong, and I realize it is not the same as the one in the solution set, but here is a clear and informal explanation of why my alternate solution is correct. I have also attached a statement addressing any concerns the TA may have raised in a comment.

Examples of bad regrade requests include

- I think this rubric is unfair.
- I deserved to get "minor error (-1 points)" instead of "major error (-4 points)."
- I know I said X, but what I really meant was Y. (We can only grade what's on the page!)
- I gave several distinct answers to the problem, and one of them was correct! (Even if another was wrong).
- I gave a correct answer to a different problem from the one on the problem set.
- Any request that asserts your solution is correct without giving new information that helps the TA interpret your solution. If your regrade request just says "My solution is correct, please take another look at it," the answer will probably be "I looked at it the first time, and I disagree with you, so you are getting no points back." Regrade requests result from communication failures (either the TA has failed to properly explain to you why your answer is wrong, or you have failed to clearly communicate your solution and why it is correct). So if there is no new information, the TA is unlikely to change their mind.

### Religious Observances

Illinois law requires the University to reasonably accommodate its students' religious beliefs, observances, and practices in regard to admissions, class attendance, and the scheduling of examinations and work requirements. You should examine this syllabus at the beginning of the semester for potential conflicts between course deadlines and any of your religious observances. If a conflict exists, you should notify your instructor of the conflict and follow the procedure at <https://odos.illinois.edu/community-of-care/resources/students/religious-observances/> to request appropriate accommodations. This should be done in the first two weeks of classes.

### Academic Integrity

As a student it is your responsibility to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. A short guide to academic integrity issues may be found at [www.provost.illinois.edu/academicintegrity/students.html](http://www.provost.illinois.edu/academicintegrity/students.html). The authoritative source is the Student Code (<http://studentcode.illinois.edu/>). If you are unsure whether a situation may violate Academic Integrity, you can visit <https://engineering.illinois.edu/online/current-students/policies/academic-integrity.html> for examples or ask me for clarification.



I will enforce the university's standards of Academic Integrity. All alleged infractions will be documented in the campus-wide FAIR database and investigated, and all committed infractions will result in sanctions.

### **Accommodations for Individuals with Disabilities**

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible **during the first week of the course**. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 333-4603, e-mail [disability@illinois.edu](mailto:disability@illinois.edu) or go to the <http://www.disability.illinois.edu/>. If you are concerned you have a disability-related condition that is impacting your academic progress, there are academic screening appointments available on campus that can help diagnosis a previously undiagnosed disability by visiting the DRES website and selecting "Sign-Up for an Academic Screening" at the bottom of the page.

### **Additional University Resources**

If you are interested in obtaining information to improve writing, study skills, time management or organization, the following campus resources are available to all students:

- Writer's Workshop
  - Undergrad Library
  - 217-333-8796
- <http://www.cws.illinois.edu/workshop>
- <https://www.disability.illinois.edu/strategies>
- <http://www.counselingcenter.illinois.edu/self-help-brochures/>

Also, most college offices and academic deans provide academic skills support and assistance for academically related and personal problems. Links to the appropriate college contact can be found by going to this website and selecting your college or school: <http://illinois.edu/colleges/colleges.html>.

If you are experiencing symptoms of anxiety or depression or are feeling overwhelmed, stressed, or in crisis, you can seek help through the following campus resources:

Counseling Center  
206 Student Services Building  
7:50 a.m.-5:00 p.m., Monday through Friday  
Phone: 217-333-3704

McKinley Mental Health  
313 McKinley Health Center  
8:00 a.m.-5:00 p.m., Monday through Friday  
Phone: 333-2705

McKinley Health Education offers individual consultations for students interested in learning relaxation and other stress/time management skills, call 333-2714.

### **General Emergency Response Recommendations**

Emergency response recommendations can be found at the following website: <http://police.illinois.edu/emergency-preparedness/>. I encourage you to review this website and the campus building floor plans website within the first 10 days of class. <http://police.illinois.edu/emergency-preparedness/building-emergency-action-plans/>. Check out campus safety video and be sure to join Illini Alerts.

### **Family Educational Rights and Privacy Act (FERPA)**

Any student who has suppressed their directory information pursuant to *Family Educational Rights and Privacy Act* (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See <https://registrar.illinois.edu/academic-records/ferpa/> for more information on FERPA.

### **Sexual Misconduct Policy and Reporting**

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX and Disability Office. In turn, an individual with the Title IX and Disability Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: [wecare.illinois.edu/resources/students/#confidential](https://wecare.illinois.edu/resources/students/#confidential).

Other information about resources and reporting is available here: [wecare.illinois.edu](https://wecare.illinois.edu).

### **Statement on Diversity and Inclusion**

The Grainger College of Engineering is committed to the creation of an anti-racist, inclusive community that welcomes diversity along a number of dimensions, including, but not limited to, race, ethnicity and national origins, gender and gender identity, sexuality, disability status, class, age, or religious beliefs. The College recognizes that we are learning together in the midst of the Black Lives Matter movement, that Black, Hispanic, and Indigenous voices and contributions have largely either been excluded from, or not recognized in, science and engineering, and that both overt racism and micro-aggressions threaten the well-being of our students and our university community.

The effectiveness of this course is dependent upon each of us to create a safe and encouraging learning environment that allows for the open exchange of ideas while also ensuring equitable opportunities and respect for all of us. Everyone is expected to help establish and maintain an environment where students, staff, and faculty can contribute without fear of personal ridicule, or intolerant or offensive language. If you witness or experience racism, discrimination, micro-aggressions, or other offensive behavior, you are encouraged to bring this to the attention of the course director if you feel comfortable. You can also report these behaviors to the Bias Assessment and Response Team (BART) (<https://bart.illinois.edu/>). Based on your report, BART members will follow up and reach out to students to make sure they have the support they need to be healthy and safe. If the reported behavior also violates university policy, staff in the Office for Student Conflict Resolution may respond as well and will take appropriate action.

The diversity of the participants in this course is a valuable source of ideas, problem solving strategies, and engineering creativity. If you feel that your contribution is not being valued for any reason, please speak with me privately. If you wish to communicate anonymously, you may do so in writing. We are all members of an academic community where it is our shared responsibility to cultivate a climate where all students/individuals are valued and where both they and their ideas are treated with respect. Developing and maintaining that climate is part of the expectations for this course. If you have made it this far paying attention, thank you. Email me before the second week of class, using the correct subject line format with your name in the subject line to receive 1 extra credit point.

### **College Statement about COVID-19**

Following University policy, all students are required to engage in appropriate behavior to protect the health and safety of the community, including wearing a facial covering properly, maintaining social distance (at least 6 feet from others at all times), disinfecting the immediate seating area, and using hand sanitizer. Students are also required to follow the campus COVID-19 testing protocol.

Students who feel ill must not come to class. In addition, students who test positive for COVID-19 or have had an exposure that requires testing and/or quarantine must not attend class. The University will provide information to the instructor, in a manner that complies with privacy laws, about students in these latter

categories. These students are judged to have excused absences for the class period and should contact the instructor via email about making up the work.

Students who fail to abide by these rules will first be asked to comply; if they refuse, they will be required to leave the classroom immediately. If a student is asked to leave the classroom, the non-compliant student will be judged to have an unexcused absence and reported to the Office for Student Conflict Resolution for disciplinary action. Accumulation of non-compliance complaints against a student may result in dismissal from the University.

## Schedule

Week	Day	Date	Lecture/Lab	Reading
1	Mon	1/25/21	Lec 1: Course organization, overview of HFE (key concepts and goals), examples of good/bad design	T: 1-15
	Wed	1/27/21	Lec 2: Anatomy and Physiology	T: 449-476
	Thu	1/28/21	Lab 1: Examples of bad design on campus and human subject research. Review lab report format, CATME. <b>Individual lab.</b>	
	Fri	1/29/21	<b>Week 1 due date:</b> Quiz 1 due by 11:59 p.m. via GradeScope Lab 1 due by 11:59 p.m via GradeScope	
2	Mon	2/1/21	Lec 3: Vision	T: 85-103
	Wed	2/3/21	Lec 4: Vision Search and perception	T: 103-111
	Thu	2/4/21	Lab 2: Presentation on Technical Writing and Writers Workshop Resources <b>Individual lab - human subjects research training</b>	
	Fri	2/5/21	<b>Week 2 due date:</b> Quiz 2 due by 11:59 p.m. via GradeScope Lab 2 due by 11:59 p.m. via GradeScope CATME survey due via <a href="https://www.catme.org/login/index">https://www.catme.org/login/index</a> <i>Note: Last day to add full semester class.</i>	
3	Mon	2/8/21	Lec 5: Auditory processes Note: last day to add a class	T: 123-141
	Wed	2/10/21	Lec 6: Noise and hearing protection	T: 131-135
	Thu	2/11/21	Lab 3a: Workspace noise and work performance	
	Fri	2/12/21	<b>Week 3 due date:</b> Quiz 3 due by 11:59 p.m. via GradeScope	
4	Mon	2/15/21	Lec 7: Anthropometry	T: 389-405
	Wed	2/17/21	Break - no class.	
	Thu	2/18/21	Lab 3b: Workspace noise and work performance (writing)	

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Last updated: January 11, 2021

Week	Day	Date	Lecture/Lab	Reading
	Fri	2/19/21	<b>Week 4 due date:</b> Quiz 4 due by 11:59 p.m. via GradeScope Lab 3 due by 11:59 p.m via GradeScope	
5	Mon	2/22/21	Lec 8: Workspace design	T: 405-417
	Wed	2/24/21	Lec 9: Cumulative trauma	T: 439-445
	Thu	2/25/21	Lab 4a: Work station design	
	Fri	2/26/21	<b>Week 5 due date:</b> Quiz 5 due by 11:59 p.m. via GradeScope Project proposal topic due by 11:59 p.m. via GradeScope	
6	Mon	3/1/21	Lec 10: Biomechanics and NIOSH	T: 419-439
	Wed	3/3/21	Lec 11: Environmental stressors	T: 479-485
	Thu	3/4/21	Lab 4b: Work station design (writing)	
	Fri	3/5/21	<b>Week 6 due date:</b> Quiz 6 due by 11:59 p.m. via GradeScope Lab 4 due by 11:59 p.m via GradeScope	
7	Mon	3/8/21	Review for Exam 1	
	Wed	3/10/21	Exam 1	
	Thu	3/11/21	Project work day - no class	
	Fri	3/12/21	<b>Week 7 due date:</b> No quiz!	
8	Mon	3/15/21	Lec 12: Memory and attention	T: 161-199
	Wed	3/17/21	Lec 13: Decision making	T: 201-228
	Thu	3/18/21	Lab 5a: Decision making	
	Fri	3/19/21	<b>Week 8 due date:</b> Quiz 7 due by 11:59 p.m. via GradeScope Deadline to respond to feedback on project topic - finalize, clarify, etc. Early informal feedback by 11:59 p.m. (extra credit - TBD if GradeScope or Compass26, pending way to preserve anonymity) <i>Note: Last day to drop full semester class without "W" and elect credit/no credit.</i>	

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Week	Day	Date	Lecture/Lab	Reading
9	Mon	3/22/21	Lec 14: Signal detection and warnings	T: 111-117
	Wed	3/24/21	Break - no class.	
	Thu	3/25/21	Lab 5b: Decision making (writing)	
	Fri	3/26/21	<b>Week 9 due date:</b> Quiz 8 due by 11:59 p.m. via GradeScope Lab 5 due by 11:59 p.m via GradeScope	
10	Mon	3/29/21	Lec 15: HCI	T: 323-355
	Wed	3/31/21	Lec 16: Displays	T: 243-279
	Thu	4/1/21	Lab 6a: Usability	
	Fri	4/2/21	<b>Week 10 due date:</b> Quiz 9 due by 11:59 p.m. via GradeScope	
11	Mon	4/5/21	Lec 17: Controls	T: 283-302
	Wed	4/7/21	Lec 18: Automation	T: 357-387
	Thu	4/8/21	Lab 6b: Usability (writing)	
	Fri	4/9/21	<b>Week 11 due date:</b> Quiz 10 due by 11:59 p.m. via GradeScope Lab 6 due by 11:59 p.m via GradeScope	
12	Mon	4/12/21	Lec 19: Job evaluation and design (including work system model)	T: 17-47, 74-75
	Wed	4/14/21	Lec 20: Work study	Readings on compass
	Thu	4/15/21	Lab 7a: Work study	
	Fri	4/16/21	<b>Week 12 due date:</b> Quiz 11 due by 11:59 p.m. via GradeScope	
13	Mon	4/19/21	Lec 21: Workload, fatigue and stress	T: 485-499
	Wed	4/21/21	Lec 22: Teams	T: 581-604
	Thu	4/22/21	Lab 7b: Work study (writing)	

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Week	Day	Date	Lecture/Lab	Reading
	Fri	4/23/21	<b>Week 13 due date:</b> Quiz 12 due by 11:59 p.m. via GradeScope Lab 7 due by 11:59 p.m via GradeScope	
14	Mon	4/26/21	Lec 23: Accidents and errors	T: 511-546, readings on compass
	Wed	4/28/21	Project work day - no class	
	Thu	4/29/21	Lab 8: Repeat Lab 1 (examples of bad design on campus), reflect on changes. <b>Individual lab.</b>	
	Fri	4/30/21	<b>Week 14 due date:</b> Quiz 13 due by 11:59 p.m. via GradeScope Lab 8 due by 11:59 p.m via GradeScope Optional: submit paper and/or poster for feedback	
15	Mon	5/3/21	Review for Exam 2	
	Wed	5/5/21	Exam 2	
	Thu	5/6/21	Reading day! No classes.	
	Fri	5/7/21	<b>Week 15 due date:</b>	
16	TBD	5/x/21	<b>Final exam period 5/7-5/14 - schedule not set yet</b> See <a href="https://registrar.illinois.edu/faculty-staff/final-exam-scheduling/final-exam-schedule/">https://registrar.illinois.edu/faculty-staff/final-exam-scheduling/final-exam-schedule/</a> for updates Poster and project due by start of period via GradeScope. Presentations during final exam period	

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