

Abilene Approval Chart for Curriculum Changes

A = Approve I = Information Item R = Respond in Writing

Course Number ITC 125_____ or Degree Plan(s) _____

State the requested change and reason. A memo may be attached if more space is necessary.

1. Add ITC 125 to the Social and Behavioral Science menu in general requirements.
Menu-specific application and Fall 2022 course syllabus are appended.

Indicate the requested change.

	Change to a Course	Dept./School ¹	College	Dean	TEC	UGEC	AUAC/Grad	Provost	President
1.	Title (description unchanged)	A	A	A	I	–	I	I	I
2.	Description (not affecting content)	A	A	A	I	–	I	I	I
3.	Course term(s)	A	I	A	I	–	I	I	I
4.	Content (change of course outcomes)	A	A	A	I	–	I	A	I
5.	Number of hours (lecture, lab, contact)	A	A	A	A	–	A	A	I
6.	Course number within the hundred	A	A	I	I	–	I	I	I
7.	Course number beyond the hundred	A	A	A	A	–	A	A	I
8.	Prerequisites	A	A	A	I	–	I	I	I
9.	Course fee(s)	A	–	A	–	–	–	A	I
10.	From U to G or G to U	A	A	A	A	–	A	A	I
11.	Cross-list course	A	A	A	A	–	A	A	I
12.	Department of record	A	A	A	A	–	A	A	I
13.	Close a course	A	A	A	A	–	A	A	I
14.	New course (includes combining or splitting courses)	A	A	A	A	–	A	A	I

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	Change to the University Requirements (All Campuses)	Dept./School¹	College	Dean	TEC	UGEC	AUAC/Grad	Provost	Faculty	President	Trustees
1.	University Requirements — Change course outcomes of an included course ²	A	A	A	–	A	–	A	–	A	–
2.	University Requirements — Add or drop a required course from the University Requirements ²	A	A	A	–	A	–	A	A	A	–
3.	University Requirements — Add or drop a course from a menu within the University Requirements ²	A	–	–	–	A	–	A	–	A	–
4.	University Requirements — Change hours within a menu in the University Requirements ²	A	A	A	–	A	–	A	A	A	–
	Change to Catalog Information (for Campus)										
1.	General Requirements for Bachelor's Degrees and Associate's Degrees	–	–	–	–	–	A	A	A	A	–
2.	Policies governing academic probation and suspension	–	–	–	–	–	A	A	A	A	–
3.	Requirements for graduating with honors	–	–	–	–	–	A	A	A	A	–
	Change to a Degree Plan Proposed by Faculty or College										
5.	Educational Program — Revise ³	A	A	A	A	–	A	A	–	A	–
6.	Educational Program — Adopt/change admission requirements	A	A	A	A	–	A	A	–	A	–
7.	Educational Program — Add ³	A	A	A	A	–	A	A	A	A	I
8.	Educational Program — Discontinue	A	A	A	A	–	A	A	A	A	I
9.	GPA — Revise program-required GPAs	A	A	A	A	–	A	A	–	A	–
10.	Minor — Revise	A	A	A	I	–	I	I	–	I	–
11.	Minor — Add	A	A	A	A	–	A	A	–	A	–
12.	Minor — Discontinue	A	A	A	A	–	A	A	–	A	–
13.	Degree — Add	A	A	A	A	–	A	A	A	A	I
14.	Degree — Discontinue	A	A	A	A	–	A	A	A	A	I
	Change to a Degree Plan Proposed By Provost										
15.	Educational Program — Discontinue	R	–	R	A	–	A	A	A	A	I
16.	Minor — Discontinue	R	–	R	A	–	A	A	–	A	–
17.	Degree — Discontinue	R	–	R	A	–	A	A	A	A	I

¹ When an academic unit does not have a council, the UGEC and/or UUAC will serve as its academic council, depending on the nature of the issue.

² Courses that satisfy ACU's University Requirements will normally have lower-level numbering, be free of prerequisites and co-requisites, appeal to more than one or two majors, and "not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession" (SACS 2.7.3). Departments may request exceptions to the first three criteria.

³ For undergraduate majors, a minimum of 30 hours is required. These programs must have a minimum of 6 elective hours, unless the requirements of external accrediting bodies make it impossible.

Department/School Chair(s)	
<u>John Homer</u>	<u>9/16/22</u>
Signature	Approval date
Signature	Approval date

College Academic Council(s)	
Signature	Approval date
Signature	Approval date

Dean(s)	
Signature	Approval date
Signature	Approval date

Teacher Education Council	
Chair's signature	Approval date

University General Education Council	
Chair's signature	Approval date

Abilene Undergraduate Academic Council	
Chair's signature	Approval date

Graduate Council	
Chair's signature	Approval date

Provost	
Signature	Approval date

Faculty	
Chair of Faculty Senate	Approval date

President	
Signature	Approval date

Application for Social and Behavioral Science Menu

Guidelines For All General Education Courses

1. All general education courses must be 100-level or above.
2. General education courses should present a breadth of knowledge, not focusing on skills, techniques, and procedures specific to a particular occupation or profession.
3. Individual courses will fulfill only a single general education requirement.
4. Courses free of prerequisites are preferred. Applications to add courses with prerequisites must provide additional evidence that the course contributes to a student's breadth of knowledge and is not specific to a particular occupation or profession.
5. Each course may appear on a maximum of two menus that accept applications (arts and humanities, cultural literacy, life and physical sciences, and social and behavioral sciences).

Social and Behavioral Science Description

Courses within this domain help students examine behavior and interactions among individuals, groups, institutions, and events to understand the complexities of social systems.

Instructions

Complete this form and submit it with a course syllabus and approval chart to the University General Education Council. Faculty submitting an application should be prepared to perform annual assessment for their course. The assessment will be based on the rubric submitted as part of this course application.

Subject code, course number, and title of course:	ITC 125
Terms offered:	Fall
Catalog description:	An introduction to human behavior and interaction with technology and our digital environment. Students study how behavioral factors such as cognition, memory, language, perception, personality, and emotion can impact the design of and interaction with our digital world. May be used to satisfy university requirements.
Course prerequisites:	None
Cross-listed courses: *Note: Many gen ed courses are cross-listed between the Abilene and Dallas campuses.	None
Other general education menus on which the course appears or you are applying for:	N/A

Description of Menu Fit

Please describe how your class fits into the Social and Behavioral Sciences Menu (200 words or less).

Human-Computer Interaction (HCI) introduces students to the complexities of the ways humans interact with technology. This could involve using physical devices or interaction through digital means by individuals or groups. HCI sits at the intersection of multiple social science disciplines, as explained in a quote from the introduction from a popular textbook on the subject:

“Researchers created the interdisciplinary design science of human-computer interaction by applying the methods of experimental psychology to the powerful tools of computer science. Then they integrated lessons from education and industrial psychologists, instructional and graphic designers, technical writers, experts in human factors or ergonomics, and growing teams of anthropologists and sociologists.” – Designing the Human Interface by Shneiderman et al., 2017.

Course Content

Using your syllabus as evidence, demonstrate that either the majority of course content or the majority of graded student work adheres to the Social and Behavioral Sciences description above (200 words or less).

Weekly lectures connect students to cognitive and/or psychological phenomena related to the use of technology. Regular sessions in the Maker Lab creating prototypes expose students to ideas in ergonomics. Weekly “bad design” discussions expose students to anthropological issues related to how humans use technology. These three topics comprise the bulk of weekly course content, therefore, a majority of the course content is related to Social and Behavioral sciences.

Prerequisites

If the course has prerequisites, provide evidence that the course contributes to a student’s breadth of knowledge. Also provide evidence that the course content is not specific to a particular occupation or profession (200 words or less).

There are no prerequisites to ITC 125. The content of ITC 125 is broadly applicable because it focuses on how humans interact with technology, something we expect all of our students to do, and to do so ethically. Human-computer interaction draws broadly from multiple SBS disciplines, such as psychology, anthropology, and sociology.

Relevant Outcomes

At a minimum, a course applying to the Social and Behavioral Science menu must address at least one performance indicator from each of the following areas:

- Social and Behavioral Sciences Subject Matter
- A2: Listen to, understand, and critically evaluate rhetorical claims.
- C1: Evaluate widely disparate sources of information and competing evidence to form their own reasoned positions.
- C2: Analyze quantitative data, published writing, or observable phenomena to draw

informed conclusions.

Ideally, assessment will occur within one or two exams/assignments. Please indicate which exams or assignments will be used for each performance indicator. Provide assignment prompts if available.

Area to Be Assessed	Assessment Artifact
SBS subject matter	“User Testing Participation”: Students will recognize and discuss the application of core HCI principles regarding interacting with technology via participation in user testing.
Outcome A2	Weekly readings and quizzes over those readings.
Outcome C1	“Bad Design Discussions”: Students are provided with examples of poorly designed technology and asked to evaluate, in HCI terminology, why the design is bad and how they would fix it. Students must come to their own position and defend it.
Outcome C2	“Rapid Prototypes”: Students are provided requirements for a device and they are required to quickly create a prototype that will be tested against various user interactions. They must observe this user testing, evaluate the effectiveness of their device, and draw informed conclusions about how they will iterate on its design during the next session.

Please use the following rubric to perform assessment each year. If a performance indicator is not assessed, please write “Not Assessed” in the “Meets Expectations” section. The last two pages have rubric examples for your reference; these pages may be deleted before submitting your application.

Social and Behavioral Science Subject Matter

Students will be able to:	Shortcomings	Meets Expectations	Points of Excellence
Understand and/or investigate behavior and interactions among individuals, groups, institutions, events, and social systems	Students provide inaccurate or incomplete response to essay prompts	Students respond accurately and completely to an essay prompt targeting their experience participating in user testing.	Student response to prompt is especially thorough and/or imaginative

Student Learning Outcome A2 (select at least one)

Students will be able to:	Shortcomings	Meets Expectations	Points of Excellence
Understand intent of source		Not Assessed	
Interpret source within rhetorical context	Students answer fewer than 75% of test questions correctly	Students correctly answer 75% or more of test questions focused on Social and Behavioral Sciences subject matter	Students correctly answer 90% or more of test questions focused on the subject matter above
Evaluate relevance of source within multiple contexts		Not Assessed	

Student Learning Outcome C1 (select at least one)

Students will be able to:	Shortcomings	Meets Expectations	Points of Excellence
Compare and contrast multiple viewpoints on a topic		Not Assessed	
Develop and express an evidence-based viewpoint on a topic	Students fail to reference source material in defense of their own position, or misuse source material	Students use source material to defend their own position	Student response to prompt successfully integrates knowledge from other courses
Synthesize information from multiple sources		Not Assessed	

Student Learning Outcome C2

Students will be able to:	Shortcomings	Meets Expectations	Points of Excellence
Read and interpret data in a form that is appropriate for the discipline	Students provide inaccurate or incomplete response to essay prompts	Students accurately draw conclusions about data	Student response to prompt is especially thorough and/or imaginative

ITC 125 – INTRODUCTION TO HUMAN-COMPUTER INTERACTION

3 CREDIT HOURS

MWF 9:00 – 9:50 AM

DR. JAMES PRATHER, FALL 2022



Instructor:	James Prather	Office:	Mabee Business Building 271
Phone:	325-674-2493	Office Hours:	MW 1:00pm – 4:00pm
Email:	jr09a@acu.edu		

The mission of Abilene Christian University is to educate students for Christian service and leadership throughout the world. We achieve our mission by providing a supportive, welcoming, Christ-centered community in which we foster academic excellence through innovative education, real-world learning opportunities, and faculty-guided research.

The mission of the College of Business Administration is to educate business and technology professionals for Christian service and leadership throughout the world.

The mission of the School of Information Technology and Computing is to provide students with the *highest quality education* possible in the ever-changing high-tech arena, and to establish within them a *foundation of faith* from which they can lead and serve in world-changing ways.

Course Description

Serving as a broad introduction to the field of Human-Computer Interaction, this course will expose students to a theoretical foundation for human factors in technology design and development, train them to evaluate and analyze design elements in technology, learn how to conduct user testing and observation, and allow them to rapidly create and test their designs. Students will learn key insights from the fields of psychology, neuroscience, sociology, and design and apply those insights to the field of technology and computing.

Intended Audience

This course is intended for any student on campus, specifically focusing on freshmen and sophomores as part of the General Education requirements of the university within the Social Sciences menu.

Course Outcomes

Students who complete this course will have demonstrated the following student learning outcomes:

- Recall material from in-class lectures and reading assignments regarding the basic theoretical foundation of human-computer interaction.
- Apply course material to explain how and why both physical and digital objects are poorly designed and how they could be changed to better reflect human-centered design.
- Learn how to ideate, design, create, and test rapid prototypes.
- Understand the empirical process of user testing and how it impacts technology design and development.
- Learn how good design can help people, including accessibility for disabled people, and how our Christian faith informs this aspect of the discipline.

Course Competencies

	Competency	Measurement
1	Students will be able to recall and define core terminology from the discipline. This information will be presented in class lectures and from reading assignments from the textbook.	Quizzes and exams.
2	Recognize and discuss the application of core HCI principles through participation in user testing.	After participating in user testing sessions with students taking CS 330 Human-Computer Interaction, students will reflect on their experiences and the application of course content.
3	Be able to identify where design fails to consider human behavior and describe causes using core HCI terminology.	In-class “bad design” discussions and presentations.
4	Apply concepts learned in class through hands-on practice to work through ideation, prototyping, and testing.	On-site Maker Lab in-class assignments.

Text

Norman, Kent (2017). *Cyberpsychology: An Introduction to Human-Computer Interaction (2nd Edition)*

Prerequisites

None

Format

Class will mainly consist of lecture, discussion, small group activities, and trips to the ACU Maker Lab in the Brown Library.

Grading

Component	Weight
Reading Quizzes	10%
Participation/Attendance	10%
Maker Lab Rapid Prototypes	20%
Bad Design Presentations	15%
User Testing Participation	10%
Midterm Exam	15%
Final Exam	20%

Quizzes

Reading will be assigned on a weekly basis from the textbook. Quiz questions will come directly from the textbook, so reading should be sufficient to do well. Quizzes will occur every Friday at the beginning of class.

Participation

You are expected to come to class and be ready to engage with the material. Merely being present in class is not considered participation. Participation includes a 1-minute essay after each lecture (Mondays) quickly recapping what you learned that day. As long as students participate in good faith, the 1-minute essay is a completion grade. Participation also includes peer discussions during class.

Peer Discussions

After each lecture, students will take a few minutes to discuss what they learned with those sitting around them. In your group discussions, answer the following:

1. What is the most interesting thing you learned today?
2. What is an example of today's lecture applied to technology you regularly use?

Maker Lab Rapid Prototypes

There will be four trips to the Maker Lab taken as a class. During each of these four trips, you will be challenged to follow the human-centered design process to rapidly create a prototype in just thirty minutes. The class will then discuss these prototypes, their functionality, and ways to improve them if there was to be a second iteration.

Bad Design Presentations

Once per week, each student will work in groups with the people sitting nearby in the classroom to discuss and evaluate a particular piece of technology, as assigned by the professor, and describe its design failings in human factors terminology. Each group will then quickly present to the entire class their findings.

User Testing Participation

Students in CS 330 Human-Computer Interaction are required to create an app and conduct user testing. The students in ITC 125 will be randomly assigned to an upper-level student to serve in their user testing pool. In this way, ITC 125 students are not required to conduct user testing but are exposed to it through participation. All students will gain a better understanding of how user testing works and the benefits it provides to the design and creation of new technology. As a secondary, added benefit, those students who continue on to take CS 330 will then have a better understanding of user testing from the other side of the table. While it is optimal to run ITC 125 and CS 330 in parallel, this is not required to complete this assignment as the professor can simulate this in other ways. After participating in user testing, students will write a 1 page report on their experiences.

Midterm and Final Exams

Two exams will be given during the semester to assess comprehension of topics discussed in lectures and in reading assignments. This will consist of a mixture of questions from weekly quizzes plus new questions directly from the lectures.

Academic Integrity:

Students are expected to abide by the University's policies and principles of academic integrity - <http://www.acu.edu/community/cas/departments-schools/jmc/jmc-resources/academic-integrity-policy.html>

In accordance with this policy, it is expected that any work you submit, as partial or full solution to any homework assignment or exam question, will be work begun and completed by yourself. Any answer or other materials copied at any point from another source is plagiarism and a violation of the academic integrity policy. Similarly, it is expected that you will not provide or make available any work you have done to another student; this, too, is a violation of the academic integrity policy.

A first violation of the policy will result in a zero for the assignment and a 10% reduction of the overall course grade, essentially a one-letter drop in the final grade. A second violation will result in an overall grade of 'F' for the course and a report submitted to the Dean of Students.

Students with Disabilities:

Abilene Christian University is committed to providing a learning atmosphere that reasonably accommodates qualified persons with disabilities. If you feel you have a disability that may impair your capacity to successfully complete this course, please contact Student Disability Services (674-2750) in the Learning Enhancement Center. Student Disability Services assists students with disabilities in obtaining appropriate academic accommodations.

Title IX Policy:

At ACU, we strive to comply with all applicable legal requirements prohibiting, preventing, and responding to sexual misconduct against any member of the ACU community. Moreover, as a Christian community, ACU has committed itself, unequivocally, to ensuring a working and learning environment in which the dignity of every individual is respected.

Our Title IX – Sexual Misconduct Policy outlines specific definitions and procedures related **sexual harassment, sexual exploitation, sexual assault, stalking, and relationship violence**. If you experience sexual misconduct in any of these forms, we encourage you to **report it** so that we can help maintain a work and academic environment free of unlawful behavior. You can report it by going here:

<https://www.acu.edu/community/offices/hr-finance/hr/title-ix/file-report.html>

Attendance

You are expected to attend and fully engage in every class session. Attendance measures, of course, your physical presence in the classroom, but also preparation from beforehand and attentiveness throughout the class session. Before each class, you should have completed already any assigned reading or other work and be prepared to ask pertinent questions about recent or new course topics from the notes or homework. If you are unprepared for class or clearly occupied with other materials (or asleep) during class, you may be counted absent even though you are physically present. After six absences, each additional absence will reduce your overall course grade by 3%. At the instructor's discretion, any student with six or more absences (two full weeks of class) may be withdrawn from the course with a grade of WF.

ITC 125: Introduction to Human-Computer Interaction
Fall 2022
(this calendar may be modified by the professor as necessary)

Week	Day	Class Topic	Assignment Due
1	M	Intro: What is Usability?, Syllabus	
	W	Lecture: Affordances, peer discussions	1-minute essay
	F	Chapter 1 Quiz – Introduction Chapter 1 class discussion, short video	Quiz
2	M	Lecture: Signifiers, peer discussions	1-minute essay
	W	Bad Design Discussions 1	
	F	Chapter 2 Quiz – Biological and Technological Chapter 2 class discussion, short video	Quiz
3	M	Lecture: Mappings, peer discussions	1-minute essay
	W	Maker Lab Rapid Prototyping 1	
	F	Chapter 5 Quiz – Motor Interfaces: Input & Output Chapter 5 class discussion, short video	Quiz
4	M	Lecture: Constraints, peer discussions	1-minute essay
	W	Bad Design Discussions 2	
	F	Chapter 6 Quiz – Virtual Environments Chapter 6 class discussion, short video	Quiz
5	M	Lecture: Memory, peer discussions	1-minute essay
	W	Bad Design Discussions 3	
	F	Chapter 7 Quiz – Learning and Memory Chapter 7 class discussion, short video	Quiz
6	M	Lecture: Conceptual Models, peer discussions	1-minute essay
	W	Maker Lab Rapid Prototyping 2	
	F	Chapter 8 Quiz – Thinking and Problem Solving Chapter 8 class discussion, short video	Quiz
7	M	Lecture: Attention, peer discussions	1-minute essay
	W	Mid-term exam	Mid-term exam
	F	Chapter 10 Quiz – People, Performance, Personality Chapter 10 class discussion, short video	Quiz
8	M	Lecture: Emotion, peer discussions	1-minute essay
	W	Bad Design Discussions 4	
	F	Chapter 11 Quiz – Motivation and Emotion Chapter 11 class discussion, short video	Quiz
9	M	Lecture: Vision Part 1: Color, peer discussions	1-minute essay
	W	Bad Design Discussions 5	
	F	Chapter 12 Quiz – Social Media Chapter 12 class discussion, short video	Quiz
10	M	Lecture: Vision Part 2: Reading, peer discussions	1-minute essay
	W	Maker Lab Rapid Prototyping 3	

	F	Chapter 13 Quiz – Cyberpathologies and Cybertherapies Chapter 13 class discussion, short video	Quiz
11	M	Lecture: Vision Part 3: Feedback & Discoverability, peer discussions	1-minute essay
	W	Bad Design Discussions 6	
	F	Chapter 14 Quiz – Automation and Artificial Intelligence Chapter 14 class discussion, short video	Quiz
12	M	Lecture: Vision Part 4: Gaze & Gestalt Theory, peer discussions	1-minute essay
	W	Bad Design Discussions 7	
	F	Chapter 15 Quiz – Assistive Technologies Chapter 15 class discussion, short video	Quiz
13	M	No class – Thanksgiving Break	
	W		
	F		
14	M	Lecture: Touch: Intro, peer discussions	1-minute essay
	W	Maker Lab Rapid Prototyping 4	
	F	Chapter 16 Quiz – Video Games and Entertainment Chapter 16 class discussion, short video	Quiz
15	M	Lecture: Bringing it all together/wrap-up, peer discussions	1-minute essay
	W	Bad Design Discussions 8	
	F	Review for final exam	Report on experience participating in user testing
16		Final exam	