CSE/SER463: Introduction to Human-Computer Interaction

Instructor

Name: Dr. Bharatesh Chakravarthi
Office: BRICKYARD M1-40 and Online (https://asu.zoom.us/j/8095464858)
Email: bharatesh@asu.edu

Instructional Support

Instructional Assistant: To be Updated

Catalog Description

CSE/SER463 is a 3-credit course covering the design, evaluation, and implementation of interactive software intended for human use.

Enrollment Requirements

Prerequisite(s): Prereqs w/minC: CmpSci, CmpSysEgr, or GIS maj; CSE310 OR DigCltr(MedProc), Informat, or MedArt&Sci(MedProc) maj; CPI310 OR SftwrEgr BS; SER315, 316; CSE310, SER222 OR Cmp Sci&Egr or Sftwr Egr grd; Crdt only CSE463 or SER463 OR Visiting University Student

Human-Computer Interaction: Bridging Technology and Humanity

Human-Computer Interaction (HCI) is a crucial discipline that complements the technical expertise of computer science by focusing on the human aspects of technology. It integrates principles of psychology, design, and engineering to create systems that not only meet technical requirements but also align with human needs and behaviors. A solid understanding of HCI principles enriches your core computer science skills, enabling you to design systems that are not only robust and efficient but also intuitive, accessible, and engaging. In today's technology-driven world, where user satisfaction and adoption often determine a system's success, the importance of HCI cannot be overstated.

Computer science equips you with the tools to develop powerful and innovative systems, but HCI helps you ensure those systems truly resonate with their users. By blending these fields, you can create technology that solves problems while fostering positive user experiences. An HCI course empowers you to bridge the gap between cutting-edge technology and the people it serves through several key avenues:

- **Understanding User Needs**: Dive into the cognitive and emotional aspects of user interaction. Learn how to anticipate user expectations, identify pain points, and gain insights into how people navigate technology in diverse contexts. This foundational understanding helps you align your designs with real-world needs.

- **Designing Intuitive Interfaces**: Explore how to create interfaces that are not only visually appealing but also seamlessly integrate with human cognitive patterns. Reduce cognitive load by designing systems that feel natural and require minimal learning curves, ensuring an engaging and frustration-free user experience.
- **Improving Usability Through Iteration**: Master techniques for conducting usability testing, gathering actionable feedback, and refining your designs. Usability is a continuous process, and HCI equips you with the skills to iterate effectively and create systems that evolve with user demands.
- **Incorporating Neurobiology-Inspired Design**: Leverage insights from neurobiology to design systems that align with innate human behaviors and responses. By understanding how the brain processes information, you can craft interfaces that enhance focus, reduce decision fatigue, and promote sustained engagement.

By integrating HCI principles with your computer science expertise, you'll be prepared to design technology that not only works but thrives in the hands of users. This interdisciplinary approach positions you to tackle real-world challenges where technical excellence and user satisfaction go hand in hand, fostering technology that truly supports human well-being and resilience.

Course Format

This course is delivered entirely online and is designed to provide a flexible and engaging learning experience. The course is structured into **15 weekly modules**, each focusing on a specific aspect of Human-Computer Interaction (HCI).

Weekly Modules

- **Module 1:** Foundations
- **Module 2:** Behaviorist Perspective
- **Module 3:** Cognitive Perspective
- **Module 4:** Cognitive Neuroscience Perspective
- **Module 5:** Models, Cycles, and Frameworks
- **Module 6:** Motivation and Emotional Design
- **Module 7:** Design Thinking
- **Module 8:** Design Tools
- **Module 9:** Expert Evaluations and ALT-UIs
- **Module 10:** Research Tools
- **Module 11:** Usability Study
- **Module 12:** Data Analysis
- **Module 13:** Advanced Tools
- **Module 14:** Ethical Issues
- **Module 15:** Emerging Trends

Weekly Format

Each week, students will engage with a variety of activities designed to enhance understanding and application of the module's topic:

- **Pre-Recorded Lectures:** Watch engaging, high-quality video lectures that introduce the week's concepts.
- **Readings:** Complete assigned readings from textbooks, articles, or online resources that complement the lecture material.
- **Interactive Discussions:** Participate in online discussion forums to collaborate with peers, share insights, and ask questions.
- **Hands-On Activities:** Apply what you've learned through practical activities, such as designing interfaces, evaluating case studies, or working with design tools.
- **Quizzes/Assignments:** Assess your understanding of the material through weekly quizzes or assignments that reinforce key concepts.
- **Live Q&A/Office Hours (Optional):** Attend live virtual sessions with the instructor to ask questions, clarify concepts, and discuss challenges.

Pacing and Deadlines

- **Weekly Deadlines:** All tasks for a given module are due by **Sunday at 11:59 PM (course time zone)** unless otherwise specified.
- **Self-Paced Learning:** Pre-recorded lectures and readings allow students to work at their own pace within the week.
- **Instructor Support:** Instructors will be available via email and discussion boards throughout the week to address questions and provide feedback.

Tools and Platforms

- **Learning Management System (LMS):** All course materials, discussions, and assignments will be hosted on the LMS (e.g., Canvas, Blackboard, or similar).
- **Design Tools:** Modules will require the use of specific tools (e.g., Figma, Sketch, or Adobe XD) for hands-on design exercises and project work. Access instructions will be provided.
- **Communication Tools:** Students will use the LMS and video conferencing platforms (e.g., Zoom) for optional live sessions and instructor communication.

Expectations for Success

- **Engagement:** Stay active in the course by completing weekly tasks and contributing to discussions.
- **Time Management:** Allocate approximately **8–10 hours per week** to complete all activities, including lectures, readings, assignments, and project work.
- **Collaboration:** Participate meaningfully in forums and engage with peers for a richer learning experience.
- **Proactive Communication:** Reach out to the instructor with questions or concerns promptly to stay on track.

By maintaining consistent engagement and leveraging the flexibility of this online format, students will successfully navigate the course and gain a comprehensive understanding of HCI principles and their applications.

Course Objectives

In this course, you will:

- **Understand the Fundamentals of HCI**: Explore the foundational principles, models, and frameworks of human-computer interaction, including behaviorist, cognitive, and cognitive neuroscience perspectives. *(Modules 1-5)*
- **User-Centered Design**: Master the principles of user-centered design, focusing on understanding user needs, designing for usability, and incorporating motivational and emotional elements into interface design. *(Modules 6-7)*
- **Interface Design and Development**: Develop skills in designing and prototyping user interfaces using cutting-edge design thinking methodologies and advanced tools. *(Modules 7-8, 13)*
- **Cognitive Aspects of HCI**: Understand the cognitive processes underpinning human-computer interaction, including perception, decision-making, and emotional engagement. *(Modules 2-4, 6)*
- **Usability Testing and Evaluation**: Learn to conduct expert evaluations and usability studies using qualitative and quantitative methods, while analyzing user feedback to refine designs. *(Modules 9, 11)*
- **Accessibility and Inclusive Design**: Apply principles of accessibility and inclusive design to ensure interfaces are usable by individuals with diverse abilities and needs. *(Modules 7, 9)*
- **Emerging Technologies and Trends in HCI**: Stay informed about current and future trends in HCI, including augmented and virtual reality, voice interfaces, and AI-driven designs. *(Modules 13, 15)*
- **Ethical Considerations in HCI**: Examine the ethical implications of design, addressing issues of privacy, security, and the societal impact of technology. *(Module 14)*
- **Research Methods in HCI**: Develop proficiency in research methodologies, including experimental design, data collection, usability studies, and analysis. *(Modules 10-12)*
- **Real-World Applications and Case Studies**: Analyze case studies to understand the practical implications of HCI theories, tools, and frameworks. *(Integrated across modules)*
- **Project Development**: Apply the knowledge and skills acquired throughout the course in a capstone project, designing, prototyping, and evaluating a user interface that addresses real-world user needs. *(All modules culminate in this project)*

Assessment of Concepts and Skills/Evaluation of Student Progress

Assignments

There are a set of assignments that you must complete as part of the course. Assignments generally consist of a link to some information on the topic combined with a quiz or other activity to demonstrate your understanding of the material in the module.

Exams

The course involves two exams—one at the midpoint of course and one at the end, which will cover the instructional content from the course (including lectures, discussions, and activities) up to the specified point of the semester. The exams typically consist of 10-12 open-ended response items. Each of these items requires a short answer that takes about 5 minutes to complete. Here is an example question:

> Given the failures of the MCAS system in the Boeing 737 MAX crashes, redesign the system with a focus on improving pilot awareness, control, and interaction to ensure pilots are better equipped to understand and manage the system's actions. How can the system be improved to prevent similar failures, both in terms of human-computer interaction and overall system design? Consider how these design improvements could be extended to other safety-critical industries, such as healthcare or nuclear power, where the interplay between automated systems and human operators is equally crucial for ensuring safety and preventing catastrophic outcomes.

Website Redesign Project (Individual Project)

Students are tasked with identifying an e-commerce website with usability limitations and improving its design by applying established principles of good design. The goal is to create a more user-friendly website that enhances usability, streamlines user tasks, and delivers an engaging and efficient experience. This project encourages a methodical redesign process that applies theoretical concepts to practical scenarios, culminating in a functional prototype.

This project also serves as a portfolio-building opportunity, allowing students to showcase their ability to design user-focused solutions and create tangible, interactive prototypes that demonstrate their problem-solving process and design proficiency.

Project Milestones

- **Milestone 1: Site Selection and Preliminary Analysis (5%)**
  - **Task:** Students will identify an e-commerce website with significant usability challenges in at least two user tasks. Examples of tasks include navigation, product search, or the checkout process.
  - **Deliverable:** A short report that:
    - Describes the selected website.
    - Explains why it was chosen based on its usability challenges.
    - Highlights the two user tasks and the specific issues impacting their usability.

- **Milestone 2: Redesign Plan (5%)**
  - **Task:** Students will conduct an in-depth analysis of the website to identify at least ten usability limitations. These limitations will be categorized into:
    - **Major Redesign Goals**: Core areas requiring significant improvement to enhance user experience.

    - **Minor Redesign Goals**: Smaller, incremental changes that contribute to usability. Students will propose design solutions for each limitation, grounded in principles of good design (e.g., user-centered design, cognitive load reduction, accessibility, and intuitive navigation).
- **Deliverable:** A detailed redesign plan outlining:
    - Identified usability limitations.
    - Proposed design changes with justifications linked to established design principles.

- **Milestone 3: Functional Prototype and Documentation (10%)**
    - **Task:** Students will create a functional prototype of the redesigned website that incorporates the proposed improvements. The prototype should clearly demonstrate how the changes enhance the flow and usability of the identified user tasks. The entire redesign process must be documented, including:
        - The original issues identified.
        - The rationale behind each redesign decision.
        - Visuals/screenshots of before-and-after changes.
    - **Deliverable:** A functional prototype along with comprehensive documentation that explains the redesign process and highlights how the changes address usability challenges.

Benefits of the Project

This project is designed to:

- Develop students' ability to identify and address usability flaws using established design principles.
- Cultivate practical skills in interface design, prototyping, and documentation.
- Provide a tangible artifact for their UI/UX portfolio that demonstrates their ability to conceptualize, design, and refine user-centered interfaces.
- Position students to showcase their expertise to potential employers or clients by providing a concrete example of their design problem-solving process.

By completing this project, students will gain hands-on experience in redesigning for usability and user experience, applying theoretical knowledge to solve real-world challenges in the field of human-computer interaction.

Module Discussion Board

There is a discussion board for each module. Each module contains several discussion prompts. You are expected to participate in each module by making one post related to a discussion prompt and two posts that represent your response to a peer's post. Your discussion posts should reflect the original thoughts of learners based upon your assessment of the instructional content presented in this module. Your primary post should consist of a word count between 150-300. Once you have submitted one original post, you will be granted access to view other submitted posts by learners in this course. To be eligible for full credit you must RESPOND TO AT LEAST TWO other learners no later than the due date for this week's discussion. The word count for each response should consist of 100-200 words.

Module Quizzes

Each module includes a quiz that consists of a combination of open and closed response items. The open response items are specifically designed to help prepare you for the exams. The quiz content is closely related to the module's lectures, ensuring that you engage with the key concepts and materials.

Course Policies

Academic Integrity

Students in this class must adhere to ASU's academic integrity policy, which can be found at https://provost.asu.edu/academic-integrity/policy). Students are responsible for reviewing this policy and understanding each of the areas in which academic dishonesty can occur. All engineering students are expected to adhere to the ASU Student Honor Code.

All work submitted for the course cannot have been submitted for any other course or any previous section of this same course. Student academic integrity violations are reported to the Fulton Schools of Engineering Academic Integrity Office (AIO). Withdrawing from this course will not absolve you of responsibility for an academic integrity violation and any sanctions that are applied. The AIO maintains a record of all violations and has access to academic integrity violations committed in all other ASU college/schools.

Unless explicitly allowed by your instructor, the use of generative AI tools on any course assignment or exam will be considered academic dishonesty and a violation of the ASU Academic Integrity Policy. Students confirmed to be engaging in non-allowable use of generative AI will be sanctioned according to the academic integrity policy and FSE sanctioning guidelines.

Classroom Behavior and Professionalism

Students are required to adhere to the behavior standards listed in the Student Code of Conduct found in the Arizona Board of Regents Policy Manual. (http://students.asu.edu/files/StudentCodeofConduct.pdf). Students in this class are expected to acknowledge and embrace the FSE student professionalism expectation located at: https://engineering.asu.edu/professionalism/.

It is expected that students exhibit professional behavior while participating in this class. Professional conduct includes but is not limited to positively contributing to the learning environment, adhering to the policies and procedures of the class and university, notifying the instructor in case of absence, being open to feedback from instructor, attending class on time, presuming positive intent when discussing a concern with the instructor or fellow classmates, showing initiative when collaborating with others, submitting good quality work that follows the conventions of standard English, being prepared for class with the required materials, and completing required reading and note taking before class. In your email communications with

the instructor, maintain professionalism, consider your audience and purpose, take your time, and communicate clearly. Professional standards that apply to your assignments should also be exhibited in email communications.

Copyright

You must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the student first complies with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.
The contents of this course, including lectures and other instructional materials, are copyrighted materials. Students may not share outside the class, including uploading, selling or distributing course content or notes taken during the conduct of the course. Any recording of class sessions is authorized only for the use of students enrolled in this course during their enrollment in this course. Recordings and excerpts of recordings may not be distributed to others. (see ACD 304–06, "Commercial Note Taking Services" and ABOR Policy 5-308 F.14 for more information).

Course/Instructor Evaluation

The course/instructor evaluation for this course will be conducted online 7-10 days before the last official day of classes of each semester or summer session. Response(s) to the course/instructor are anonymous and will not be returned to your instructor until after grades have been submitted. The use of a course/instructor evaluation is an important process that allows our college to (a) help faculty improve their instruction, (b) help administrators evaluate instructional quality, (c) ensure high standards of teaching, and (d) ultimately improve instruction and student learning over time. Completion of the evaluation is not required for you to pass this class and will not affect your grade, but your cooperation and participation in this process is critical. About two weeks before the class finishes, watch for an email with "ASU Course/Instructor Evaluation" in the subject heading. The email will be sent to your official ASU e-mail address, so make sure ASU has your current email address on file.

Emailing Guidelines

When emailing, please be clear and concise to ensure efficient communication. Clearly indicate the course you are enrolled in and include your full name in the body of the email. Direct all course-related queries to the TA for faster responses. If the email requires the instructor's attention, please CC the TA as well. Use the following subject format, making sure to include the issue in the subject line: **[Course Code]: [Issue] - [Your Full Name]**. For example: **CSE463: Assignment Question - John Doe**. This helps us address your concerns promptly and accurately.

Generative AI

Generative AI is a technology that can often be useful in helping students learn the theories and concepts in this course. However, unless explicitly allowed by your instructor, the use of generative AI tools to complete any portion of a course assignment or exam will be considered academic dishonesty and a violation of the ASU Academic Integrity Policy. Students confirmed

to be engaging in non-allowable use of generative AI will be sanctioned according to the academic integrity policy and FSE sanctioning guidelines.

Grade Appeal Deadlines

Any grade for the in-class activity, online modules and exams can be appealed within **one week (7 days)** of publishing the grades. There will be no adjustments in grades after the two-week deadline has passed. **Please note that a request for regrading will trigger a complete regrading of the assignment in question**.

Grading Scale

Course grades will be based on a variety of assessment activities. The maximum obtainable points are as follows:

Activity	% of Overall grade
Module Quizzes (15 @ 1% each)	15%
Module Discussion Boards (15 @ 1% each)	15%
Exams (2 @ 25%)	50%
Redesign Project (Milestones 1 & 2 @ 5% each, Milestone 3 @10%)	20%

Grade	%
A+	97-100
A	93-97
A-	90-93
B+	87-90
B	83-87
B-	80-83
C+	77-80
C	70-77
D	60-70
E	<60

Harassment and Sexual Discrimination

Arizona State University is committed to providing an environment free of discrimination, harassment, or retaliation for the entire university community, including all students, faculty members, staff employees, and guests. ASU expressly prohibits discrimination, harassment, and retaliation by employees, students, contractors, or agents of the university based on any protected status: race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, and genetic information.

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and

harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at https://sexualviolenceprevention.asu.edu/faqs.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, https://eoss.asu.edu/counseling is available if you wish to discuss any concerns confidentially and privately. ASU online students may access 360 Life Services, https://goto.asuonline.asu.edu/success/online-resources.html.

Honors Credit

An Honors Enrichment Contract allows you to earn honors credit by completing an additional assignment or project that goes beyond the standard coursework. This arrangement aims to foster deeper interaction between students and instructors on challenging academic issues. Each project is expected to take 5-10 hours to complete. Here are some suggested projects for your HCI class:

- **Conduct a Research Review:**
  - **Task:** Conduct a comprehensive review of current research on a specific aspect of HCI, such as user interface design trends, accessibility challenges, or emerging technologies like AR/VR in user experience.
  - **Deliverable:** Present your findings in a detailed literature review paper (5-10 pages), summarizing key studies, trends, and future research directions.
- **Prepare and Present a Class Lecture:**
  - **Task:** Develop a 20-minute comprehensive lecture on a specialized HCI topic, such as neuroergonomics in HCI, cross-cultural design, persuasive technology, or the impact of AI on user experience.
  - **Deliverable:** Record a picture-in-picture video of your lecture, where you present the content alongside a visual presentation, and lead an online discussion session with your classmates. Provide copy of PowerPoint presentation.
- **Create a Research Proposal:**
  - **Task:** Write a thorough research proposal on a topic of interest within the HCI field. This should include a literature review, research questions, methodology, and expected outcomes.
  - **Deliverable:** Submit a detailed written proposal (5-10 pages) that outlines your planned research, demonstrating a clear understanding of the topic and proposed methods.

Instructor Responsibility

I consider it a privilege to have each of you in my class. As your instructor, I am committed to helping you learn and succeed in your course assignments. However, remember that your grade is earned through your own efforts, not given by the instructor. I will provide numerous

opportunities for you to learn the material and showcase your understanding.

Late Assignments

All assignments are due on the dates and times listed on the course Canvas site (unless announced by the instructor). Late assignments will be subject to a drop of **at least** 10% of the total grade per day up to a **maximum of a 50% penalty.** You are encouraged to submit the assignment even after 5 days passed the due date since you can still earn 50% for the submission. **Missing or corrupted assignments will also incur a penalty of at least 10% per day.** It is the responsibility of the student to submit every assignment on time and ensure the assignment meets all the requirements and is correct.

Mental Health Flexibility Policy

In recognition of the importance of mental well-being, this course includes provisions to support students experiencing mental health challenges. **Under this policy, students may be eligible for any or all the following accommodations, no questions asked**:

- **Exemption from One Week's Quiz and Discussion Board Activities:** Students may opt out of the quiz and discussion board activities associated with a week of their choosing during the semester without penalty.
- **Extended Deadline for One Assignment Submission:** Students may request a one-time extension on the submission of an assignment. This extension allows students to submit the assignment up to one week (7 days) beyond the original due date without penalty.
- **Reduced Penalty for Late Assignments:** To encourage students to submit their work even if it's late, the maximum deduction for late assignments is capped at 50%. This means that while there will still be a penalty for late submissions, students will retain the opportunity to earn at least half of the total points, mitigating the impact on their overall grade.

To avail of these accommodations, students are encouraged to contact the instructor via email to request the necessary adjustments. No additional documentation or verification will be required to access these accommodations.

Slack

Course communication tools include Slack. Below are the directions to join the course Slack workspace:

1. How to Log into Slack via the ASU Enterprise Workspace

- **Visit the ASU Slack URL**
  - Open your web browser and go to https://asu.enterprise.slack.com/.
- **Enter Your ASU Email**
  - On the sign-in page, enter your ASU email address (e.g., username@asu.edu) and click "Sign In".
- **ASU Single Sign-On (SSO)**
  - You will be redirected to the ASU Single Sign-On page.

    - Username and Password: Enter your ASUrite ID and password, then click "Sign In".
    - Two-Factor Authentication: If ASU has enabled two-factor authentication (2FA), follow the prompts to complete the 2FA process. This may involve entering a code sent to your phone or using an authentication app.
- **Access the Workspace**
    - After successfully signing in, you will be directed to the ASU Slack workspace.
    - Profile Setup: If this is your first time logging in, take a moment to set up your Slack profile with your full name and a recognizable photo.
- **Assigned to Course Slack Workspace**
    - You are automatically assigned to the course Slack workspace. Upon logging in, you will have access to all the relevant channels for your course.
- **Explore the Default Channels**
    - You will automatically be added to key channels such as #general and #random.
        - **#general**: For course-related announcements and important information.
        - **#assignment-help**: A dedicated space for students to ask questions about assignments, share tips, and offer help to classmates who may be struggling with coursework.
- **Join Additional Channels**
    - Based on your course activities and needs, you may need to join additional channels related to specific projects, assignments, or topics.
    - Invitations: Look out for invitations to these channels, or request to join them from your instructor or TAs.

Student Accessibility and Inclusive Learning (SAIL) Services

Suitable accommodations are made for students having disabilities. Students needing accommodations must register with the ASU Student Accessibility and Inclusive Learning (SAIL) Services office and provide documentation of that registration to the instructor. Students should communicate the need for an accommodation in enough time for it to be properly arranged. See ACD 304-08 Classroom and Testing Accommodations for Students with Disabilities.

Syllabus

Syllabus is intended as a general plan of study and may be adjusted (with notice) depending on needs.

Threatening Behavior

Students, faculty, staff, and other individuals do not have an unqualified right of access to university grounds, property, or services (see SSM 104-02). Interfering with the peaceful conduct of university-related business or activities or remaining on campus grounds after a request to leave may be considered a crime. All incidents and allegations of violent or threatening conduct by an ASU student (whether on- or off-campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students.

Wellness and Mental Health Support

Wellness Resources

- **Sun Devil Fitness Complex**: Offers fitness programs, recreational activities, and wellness events to help students stay physically active and mentally balanced. Visit Sun Devil Fitness (https://fitness.asu.edu/)
- **ASU Wellness**: Provides a variety of wellness programs, including stress management workshops, mindfulness training, and wellness coaching. Visit ASU Wellness (https://wellness.asu.edu/)
- **Recovery Rising**: Supports students in recovery from substance use disorders, offering a community and resources for those in recovery and allies. Visit Recovery Rising (https://wellness.asu.edu/wellness-programs/recovery-rising)

Counseling Services

- **ASU Counseling Services**: Offers confidential counseling, including individual and group sessions. Services are available in-person and via telehealth. Visit ASU Counseling Services (https://eoss.asu.edu/counseling)
- **24/7 Open Call and Open Chat**: Access mentalhealth support anytime by calling 480-921-1006 or visiting Open Call/Open Chat (https://eoss.asu.edu/counseling/services/open-call-and-open-chat)

Crisis Intervention

- **Crisis Text Line**: Text "HELLO" to 741741 for free, confidential crisis counseling via text message.
- **Empact Crisis Hotline**: 24-hour crisis hotline at 480-921-1006 for immediate assistance.