COURSE SYLLABUS¹

COSC 3331 Human-Computer Interaction 3 credit hours Spring Semester 2018 Computer Science Department

Class meeting information: 11:00 – 12:20 TR

Room: AB1 206

Professor: Bing Zhou, Ph.D. Office: AB1 212B Office Hours: TR 2:00-5:00pm E-mail: zhou@shsu.edu Office Phone: 936-294-1590

Catalog Description: This course presents a comprehensive introduction to the principles and techniques of human-computer interaction. The course examines the event-driven model through the development of applications utilizing graphic designed environments and the use of rapid application prototyping to explore a variety of techniques for HCI, particularly in relation to mobile and other non-traditional devices.

Prerequisite: COSC 1437

Course Objectives: The student will learn design issues that need to be addressed by software that interacts with humans. The students will be introduced to event-driven programming and learn to use interface design tools for mobile devices.

IDEA objectives: Gaining a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories)

Text Book: Designing the user interface: strategies for effective human-computer interaction, 5th edition, by Ben Shneiderman and Catherine Plaisant. ISBN: 978-0-321-53735-5.

Creating android applications: develop and design. By Chris Haseman. ISBN: 978-0-321-78409-4.

Attendance Policy: In accordance with University Policy

(http://www.shsu.edu/students/guide/polpro/attendance.html), regular attendance is required and your attendance will be seriously monitored. So, don't forget to give your signature on the roster. Students are expected to arrive to the classroom on time, otherwise no full attendance credit for the day will be given. You are responsible for all material covered in classes, regardless of whether you attended or not. It is your responsibility to obtain class materials and class schedule information from fellow classmates if you miss a class.

¹ If the grading policy or some other aspect of this syllabus must be adjusted, the class will be notified and any concerns regarding the change should be brought before the professor prior to the end of the semester for resolution.

Students are also expected to pay attention during lectures, to be respectful listening when the instructor or your peers are speaking, and to be fully engaged in your learning without texting, checking your phone or email, or participating in other digital distractions. If you are distracting others in your lack of participation, you will hear from instructor via email or in a short face-to-face conference before, during or after class, and participation points will be taken away throughout the semester.

Exams: Three exams verify that the student is able to remember knowledge and apply skills learned in the course. Students must attend **ALL** three exams in order to get a final grade. Late exams are not permitted unless the student can document the serious situation² that caused this to occur.

Grading Plan:

Assignments	30%
Quiz	15%
Exam 1 Exam 2	15% 15%
Exam 3	15%
Student Participation	10%

Academic Dishonesty: All work must be your own or with sources and assistance clearly documented (even group assignments should include who was in your group). See Student Guidelines, Dean of Students Policies, Code of Student Conduct and Discipline

(<u>http://www.shsu.edu/students/guide/dean/codeofconduct.html</u>) for a description of academic dishonesty and the appeals process. Unauthorized collusion may earn students involved a zero for the work. Repeated or serious cases of academic dishonesty will result in a grade of F and possibly further disciplinary action. Protect your work from copying and document any code or examples you obtain from books, the Internet, tutors, or friends.

Classroom Rules of Conduct: In compliance with the <u>University Code of Conduct</u>, students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Students should turn off or mute their cellular phones and/or pagers before class begins. Students are prohibited from using tobacco products, making offensive remarks, using inappropriate language, socializing at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Students will be warned, then directed to leave the class and/or report to the Dean of Students for disciplinary action in accordance with university policy.

² Traditionally "excused" absences include illness serious enough to justify a note from a doctor or clinic, accidents with witnesses, police reports, hospital stays, etc., that indicate they were serious enough to prevent the student from taking an exam, and deaths or serious conditions of a member of the family or loved one. The latter can be documented with contact information, news clipping, doctor's note, etc. Planned absences must be resolved prior to the absence.

Visitors in the Classroom: Occasional visiting of classes by responsible persons is allowed with prior arrangement with the instructor, as long as it does not interfere with the registered members of the class or the educational process.

STUDENTS WITH DISABILITIES POLICY: It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see:

http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf

Religious Holidays: University policy states that a student who is absent from class for the observance of a religious holy day may take an examination or complete an assignment scheduled for that day within a reasonable time after the absence if the professor is informed, in advance. Whenever possible, the student should make arrangements with the instructor at least one week in advance to make up work (see attendance policy).

Tentative Course Outline

- Chapter 1: Usability of Interactive Systems
- Chapter 2: Guidelines, Principles, and Theories
- Chapter 3: Managing Design Processes
- Chapter 4: Evaluating interface Designs
- Chapter 5: Direct Manipulation and Virtual Environments
- Chapter 6: Menu Selection, Form Fill-In, and Dialog Boxes
- Chapter 7: Command and Natural Languages
- Chapter 8: Interaction Devices
- Chapter 9: Android Application Development
- Chapter 10: Getting Started: Hello World
- Chapter 11: Application Basics
- Chapter 12: User Interface (Building UI, Basic UI Components, Event Handling, Menus and Dialogs)
- Chapter 13: Intents
- Chapter 14: Persistent Data (Internal File Storage, External File Storage, SQLite Database Storage)