

ICS 660 - Human Factors, Needs Assessment, and User-Driven Design

Instructor(s): Dr. Faisal Kalota, PMP Office: BC 221M	Email: faisal.kalota@bsu.edu Office Phone: 765-285-3285
--	--

ICS 660 Catalog Description

Intended to provide insights into the human aspects of information and communications systems planning, design, implementation, and evaluation. Includes the practice of project management techniques, needs assessment instruments and problems and opportunities involved with transparent system and user-driven technology development and deployment. Examines the user experience (UX) user needs, values, abilities and limitations within the context of business goals and objectives. This is research and project-based course.

COURSE OBJECTIVES:

SLO 1 - Critically review and analyze literature on Human Computer Interaction (HCI) & Interaction Design

SLO 2 - Analyze and evaluate existing interfaces based on industry standards.

SLO 3 - Evaluate and apply interactive design processes to develop prototypes.

WORK LOAD

This is going to be a rigorous course, and it will involve significant reading and assessment work. You will be working on multiple fronts. Aside from reading the book and the required resources on Canvas, you may spend a minimum of 6-10 hours per week on our course. It is expected that your output will be of the highest professional quality.

Grading, Assessment Strategy, and Course Expectations

Grading Scale

Percentage	Grade	Percentage	Grade	Percentage	Grade
94	A	80	B-	67	D+
90	A-	77	C+	63	D
87	B+	73	C	60	D-
84	B	70	C-	Less than 60	F

****Assessment Strategy***

Components of final course grade and relative contribution of each to final grade:

Assessment Strategy	Weight
On-going Knowledge Checks & Pop-up Quizzes	20%
Exams	30%
Misc. Activities (e.g., In-Class Exercises, Reflections, Discussion Boards, Group activities, Presentations, etc.)	25%
Major Project(s)	25%
Total	100%

* The assessment strategy and the above weight may be adjusted as deemed appropriate.

Course Material

Required Text Book(s) To Purchase:

Rogers, Y., Sharp, H., & Preece, J. (2023). *Interaction Design: Beyond Human Computer Interaction* (6th ed.). Wiley. ISBN: 978-1-119-90109-9

NOTE: You have to purchase the Sharp (above) Book

Required Books Available for Free Online or Through the BSU Library

Oguz, B., (2022). *Project Management: Navigating the Complexity with a Systematic Approach*.

<https://open.umn.edu/opentextbooks/textbooks/1269>

Gkatzidou, V., Giacomini, J., & Skrypchuk, L. (2021). *Automotive Human Centered Design Methods*. (Publisher: De Gruyter). BSU Library Link:

https://bsu.alma.exlibrisgroup.com/discovery/openurl?institution=01BSU_INST&rft_id=info:sid%2Fsummon&rft_dat=ie%3D51181883320004551,language%3DEN&svc_dat=CTO&u.ignore_date_coverage=true&vid=01BSU_INST:Services

*Soares, M. M., Rebelo, F., & Ahram, T. Z., (2022). *Handbook of Usability & User Experience: Methods and Techniques*. BSU Library Link:

https://bsu.alma.exlibrisgroup.com/discovery/openurl?institution=01BSU_INST&rft_id=info:sid%2Fsummon&rft_dat=ie%3D51173753170004551,language%3DEN&svc_dat=CTO&u.ignore_date_coverage=true&vid=01BSU_INST:Services

*Soares, M. M., Rebelo, F., & Ahram, T. Z., (2022). *Handbook of Usability & User Experience: Research and Case Studies*. BSU Library Link:

https://bsu.alma.exlibrisgroup.com/discovery/openurl?institution=01BSU_INST&rft_id=info:sid%2Fsummon&rft_dat=ie%3D51173753140004551,language%3DEN&svc_dat=CTO&u.ignore_date_coverage=true&vid=01BSU_INST:Services

* The Soares et al. (2022) book(s) is an edited book(s). Each chapter in the book is by a different author(s). When citing this book, please make sure you consult the APA guidelines on how to format the chapters in the reference list. Please refer to the section called "**Article or Chapter in an Edited Book**" on the following site for additional details:

https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_books.html.

Udemy:

Please ensure that you have access to Udemy, which is free to BSU students. Please refer to the "myballstate" portal (<https://myballstate.bsu.edu>). As of December 25, 2025, **Udemy Business** is listed under **Productivity Tools**.

University Policies and Statements

University Statement:

We are committed to ensuring that all members of the community are welcome, through valuing the various experiences and worldviews represented at Ball State and among those we serve. We promote a culture of respect and civil discourse. If you need course adaptations or accommodations because of a disability, please contact the instructor of record as soon as possible. Ball State's [Disability Services Office](#) coordinates services for students with disabilities; documentation of a disability needs to be on file in that office before any accommodations can be provided. Disability Services can be contacted at 765-285-5293 or dsd@bsu.edu.

Freedom of Expression:

In this course, we are committed to fostering a learning environment that values intellectual diversity, encourages free expression, and promotes open inquiry. As members of the Ball State Community, we treat each person in the Ball State community with civility, courtesy, compassion, and dignity and respect and learn from differences in people, ideas, and opinions. Please review Ball State University's [Statement on Freedom of Expression](#), the resources on Ball State's [Freedom of Expression webpage](#), and [Ball State's Beneficence Pledge](#).

Attendance:

- You are expected to attend classes.
- Absences will be excused for the following: funeral and bereavement leave, jury duty, late course addition, military absences, observance of religious holidays, pregnancy leave, student-athletes participating in university or department-approved activities, and university advisories.
- Students may encounter other circumstances (e.g., car accidents, job interviews) that result in course absences. Excusing these absences and adjustments is at the discretion of the instructor. However, please try to notify your instructor at the earliest.
- In general, students are expected to notify all their instructors once they anticipate being absent for any reason (e.g., funeral) or as soon as possible after the absence begins (e.g., unexpected injury or illness). The student may need to provide documentation (with confidential information redacted when appropriate) to each instructor if requested.

Title IX:

Ball State University is committed to providing a safe and inclusive learning environment for all students. If you or someone you know has experienced sexual harassment—including sexual assault, dating violence, domestic violence, or stalking, please know that you are not alone. The University offers support services and resources. For more information or to report an incident, please visit bsu.edu/titleix or contact the Title IX Coordinator at 765-285-1545 or at titleix@bsu.edu

As your instructor, I am a mandatory reporter under the Title IX policy and required to report any information I receive about possible sexual harassment. This includes information shared in class discussions, assignments, or private conversations.

What happens after I report? The Title IX Coordinator will email the person who experienced sexual harassment (complainant) and invite them to schedule a meeting. If the complainant chooses to meet with the Title IX Coordinator,

- Title IX Coordinator will offer supportive measures (e.g., counseling, extensions on deadlines, course-related adjustments, changes to work or class schedules, and/or referrals to campus offices), review the policy, and discuss options to move forward.
- If a complaint is filed by the complainant or the University, an investigation will begin following University policy.

Student Academic Ethics Policy:

Honesty, trust, and personal responsibility are fundamental attributes of the university community. Academic dishonesty and other forms of academic misconduct threaten the foundation of an institution dedicated to the pursuit of knowledge and will not be tolerated. To maintain its credibility and reputation, and to equitably assign evaluations of scholastic and creative performance, Ball State University is committed to maintaining a climate that upholds and values the highest standards of academic integrity. Visit the VPAA's [academic integrity website](#) (Students tab) for resources on understanding academic integrity, citing sources properly, and avoiding inadvertent academic dishonesty. To learn about BSU's academic integrity expectations and students' rights, please read the University [Student Academic Ethics Policy](#).

Academic integrity violations include giving or receiving an unfair academic advantage (cheating), presenting someone else's ideas or work as your own (plagiarism), and falsifying academic records. Unless otherwise indicated, you must work independently. Check with me if you are unsure whether something constitutes academic dishonesty. Examples of academic integrity violations include, but are not limited to:

- Using resources not authorized by the faculty member (including devices, AI tools, hidden notes, and open books)
- Using commercial study websites to find answers to graded assignments (Chegg, Course Hero, StudyPool, OneClass, etc.).
- Without the instructor's written permission, giving away, buying, or selling graded assignments class notes, exams, study guides, or other course materials to other students or to third-party vendors (Course Hero, Chegg, 24HourAnswers, etc.).
- Working with another person on any assignment other than authorized group projects.
- Sharing or allowing others to access your files, whether done with permission or not.
- Reusing your own work from another semester, course, or section.
- Sharing answers with others during exams (passing notes, texting, whispering, gesturing)
- Discussing exam questions and answers with students who have not taken the exam.
- Soliciting others to complete work for you.
- Cheating on assessments (e.g., quizzes, exams, etc.)

Generative AI:

All work conducted and/or submitted in this course must be your own, completed in accordance with Ball State University's [Student Academic Ethics Policy](#). Unless stated otherwise, you may not collaborate with or make use of ChatGPT or any other generative AI applications at any time to develop materials submitted in this course.

Office of Disability Services

If you need course adaptations or accommodations because of a disability, please contact the instructor of record as soon as possible. Ball State's [Disability Services](#) office coordinates services for students with disabilities; documentation of a disability needs to be on file in that office before any accommodations can be provided. Disability Services can be contacted at 765-285-5293 or dsd@bsu.edu.

Course Policies

- *Assigned Readings:* All assigned readings for the date listed are expected to be completed before class on that date.
- *Academic Integrity:* All students enrolled in ICS courses are expected to adhere to the Ball State University Academic Ethics Policy: <https://www.bsu.edu/about/administrativeoffices/associateprovost/services/studentethics> (Links to an external site.)
- *Civility:* All students enrolled in ICS courses “share a responsibility for maintaining an environment where actions are guided by mutual respect, integrity, and reason.”
- Additional course policies may be provided as deemed appropriate.
- Please do not ask for a different date to take a proctored exam unless you have a documented explanation. As graduate students, it is your responsibility to complete assignments and show up for exams on time.
- The above is not an all-inclusive list of policies. Additional policies and procedures that are not explicitly covered in the syllabus will be applied as deemed necessary.

Assignment Submission Formatting

Aside from the main objective of each assignment, there will be generic requirements, such as the file-naming convention and other requirements. You must also follow the generic requirements; otherwise, you may lose points.

Professional Conduct

As a Master's candidate, we expect you to present yourself on campus and in the classroom as a working professional. Please adhere to a professional dress in the classroom and on campus. Please also be aware of the academic ethics policy: <https://bsu.smartcatalogiq.com/en/2023-2024/graduate-catalog/the-graduate-school/student-academic-ethics-and-attendance-policies/>

Class Participation

Class participation is required. The instructor will randomly ask students to explain topics presented in class based on their reading requirements for the course. Come prepared to class.

Pop-Quizzes

There may be unannounced pop quizzes. These quizzes will be administered via Lockdown Browser. Therefore, you must ensure that you are always ready and that your laptop has the lockdown browser. The quiz will be available for a very short period, and if you are not prepared during that time, you will lose points. There will not be any make-ups for the pop quizzes.

Assessment Review Process

To ensure the authenticity of student work and uphold academic integrity, the faculty member reserves the right to require verifications of authorship or understanding of the material. This could be done in a variety of ways, such as additional assessment in the form of an oral defense, a synchronous (in-person or virtual) timed assessment, or other methods as deemed appropriate. This may be done regardless of whether academic misconduct is suspected. Therefore, just because you are asked additional questions does not necessarily mean that you are suspected of misconduct.

Late Submission

Make-up assignments and exams for full credit will be limited to professionally documented illnesses and/or emergencies, at the professor's discretion. Make-up assignments and exams without documented illnesses and/or emergencies, as determined by the professor, will be lowered one grade (10%) for each day, or fraction thereof, that the assignment is late.

In the absence of a clear penalty, all late submissions will have 10% of the points deducted for every 24 hours beyond the deadline. Some assignments may have a different late submission percentage. After 72 hours, a late assignment may not be accepted. However, even if you are late by more than 72 hours, it is recommended that you consult the instructor and still submit the assignment, with the understanding that it may or may not be accepted.