WD 310 – User Interface Design and Development (4 credits), Spring 2023
M 3:00-4:50 PM   **Location:**   **SCI A224**

Instructor:	Tim Krause, PhD	**Office**:	B239, Science Building
Web:	http://www.timkrause.info	**Phone:**	715-819-0401
Office Hours:	2:00 – 3:00 p.m. M W	**Email:**	tkrause@uwsp.edu

Course Description
Concepts and methods for evaluating interfaces with users and expert audits to improve usability and user experience. Qualitative and quantitative methods, including but not limited to: walkthroughs, checklists, user testing, surveys and online tools. **Pre-requisite:** WD 201 – Interaction Design.

Objectives
The goal of this course is to introduce and apply core concepts, techniques, and tools for evaluating user interfaces. After this course, you will be able to apply these skills and knowledge to assess the usability and user experience of products and effectively report and present findings and recommendations.

Upon completion of the course, you will:

- Be able to describe key concepts in evaluating user interfaces (UI), including but not limited to usability, user experience (UX), types of evaluation metrics, use of descriptive and inferential statistics and visual presentations in data analysis and reporting, and ethical guidelines related to human subject research.
- Be able to describe key usability and UX evaluation methods, including their application and appropriate uses, differences and similarities between methods, and benefits, drawbacks, and limitations.
- Demonstrate competency in designing experiments and applying appropriate evaluation methods to carry out small-scale usability and UX evaluation studies.
- Demonstrate competency in analyzing, reporting and presenting the findings of usability and UX evaluation studies.

Required Text and Material Purchase
Tullis, T. & B. Albert. *Measuring the User Experience: Collecting, Analyzing and Presenting Usability Metrics*. 3rd Ed. (2022). Morgan Kaufmann, ISBN: 978-0128180808.

You are also required to have some method for saving, backing up and bringing assignments to class (e.g. Flash Drive, Dropbox, Google Drive).

Assignments
Assignments will be announced in class and posted on D2L. If you miss class, it is your responsibility to check D2L for any homework assignments and supporting material which may have been given out during class.

All assignments will be turned into D2L unless otherwise specified. You will be required to complete a retrospective as part of all **formal** assignments. It will not be graded, but failure to complete one will result in a 5% reduction in the points earned for the assignment.

In-class assignments may not be made up or turned in after the end of class.

I recommend that you start working on assignments as soon as possible after they have been announced. Projects almost always take longer than originally anticipated; starting early greatly increases your odds of completing the project to your satisfaction. Please call, email or see the instructor as soon as possible, and **before the due date**, with any questions or concerns about an assignment.

Assignments

Assignments*	400	Projects (4)	400
Midterm Presentation	100		
Final Presentation	100	**Total**	**1,000**

* Assignment points will be rewarded based on smaller take-home and in-class exercises.

Final Exam: Wed. May 17th, 2:45-4:45 PM

Due Dates & Late Assignments
Unless otherwise noted by the instructor, assignments are due no later than the **beginning of class** on the due date. Grades for late assignments will be reduced by one letter grade per weekday. Assignments may only be made up if the absence was due to documented illness, approved university activity or family emergency.

If you miss class or an assignment due to an approved university activity, illness or family emergency on the day an assignment is due, it is your responsibility to contact the instructor **before the start of class that day** in order to make alternative arrangements.

Attendance
This class assumes perfect attendance. In the event you need to miss a class, please consult with classmates regarding material you may have missed.

Grading Scale

Final grades will be determined according to the following scale:

		A	100 – 95%	A-	94 – 93%
B+	92 – 91%	B	90 – 85%	B-	84 – 83%
C+	82 – 81%	C	80 – 75%	C-	74 – 73%
D+	72 – 71%	D	70 – 65%	F	< 64%

I reserve the right to lower the grading scale (e.g. it may require less than 95% to earn an A).

Academic Standards
The University of Wisconsin – Stevens Point is an academic community of individuals committed to the pursuit of learning, the acquisition of knowledge, and the education of all who seek it. This course expects that all work turned in for a grade is your own, or that of your group. A description of your rights and responsibilities as a member of the UWSP community can be found at:
http://www.uwsp.edu/admin/stuaffairs/rightsandresponsibilities.aspx

Student Academic Standards and Disciplinary Procedures (UWS/UWSP Chapter 14) is available at: http://www.uwsp.edu/admin/stuaffairs/rights/rightsChap14.pdf

Disability Statement: UW-Stevens Point provides students with disabilities reasonable accommodation to participate in educational programs, activities or services. Students with disabilities requiring accommodations to participate in class activities or to meet course requirements should contact me as early as possible. If you have a disability or acquire a condition during the semester where you need assistance, please contact the Disability and Assistive Technology Center on the 6th floor of Albertson Hall (Library) as soon as possible. They may be reached at 715-346-3365 or DATC@uwsp.edu.

Cell Phone, IM and Recording Devices
Please turn off cell phones before entering the classroom. Cell phones may not be used in the classroom without prior permission of the instructor. Instant messaging, including *Facebook and social media sites*, should also be turned off, unless you are communicating with a group member working remotely. If you would like to record (video or audio) any aspect of this course, please seek prior permission from the instructor.

Tentative Course Outline
I reserve the right to adjust the following outline according to the needs and pace of the course.
Changes will be communicated in class and on Canvas.

Textbook Topics	Case Studies and Projects
Ch1 **What is User Experience: Introduction**	
Ch2 **Background: Data, Variables and Statistics**	
Ch3 **Planning**	Methods
Ch4 **Performance Metrics**	Project 1
Ch5 **Self-Reported Metrics**	Results
Ch6 **Issues-Based Metrics**	Project 2, Midterm Presentation
Ch7 **Eye Tracking**	Discussion and Recommendations
Ch8 **Measuring Emotion**	Project 3
Ch10 **Special Topics**	Visualization
Ch 12 **Ten Keys to Success**	Final Projects and Presentations