

# WD 201 - Interaction Design (4 credits)

#### Section 1

#### Semester I 2019-2020

User-centered design process and its use in the creation of interactive products. Includes key concepts and methods in Interaction Design, including, but not limited to, elicitation of product requirements, user and task modeling, information architecture, visual design principles, and wireframing and prototyping.

### **Course information**

Class meetings Section 1: Tuesdays & Thursdays, 10:00 AM – 11:50 AM, Science A224

Final exam time Section 1: Wednesday, December 18, 12:30 PM – 2:30 PM, SCI A224

**Instructor** Tomi Heimonen, PhD

Office location B235, Science Building

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Communication You are encouraged to contact me if you have any questions. For online

communications, please use the functionality available in Canvas whenever possible. When communicating via email, please add "WD 201" in the subject

line.

Office hours Monday through Thursday, 9:00 AM – 10:00 AM

I have an "open door" policy – feel free to check in when I'm in my office.

**Class website** Canvas will be used to distribute course materials, assignments and grades.

Check it regularly to stay informed of changes to class schedules and other

important announcements.

Prerequisites WD 100 – Innovation for People and Computers; CNMT 210 – Web Design

and Development I or consent of the instructor.

Textbooks The following required texts will be used in this course. Both texts are

available at Text Rental.

 Alan Cooper, Robert Reimann, David Cronin, Christopher Noessel: *About Face: The Essentials of Interaction Design*, 4th Edition, Wiley, 2014. ISBN: 978-1-118-76657-6

Louis Rosenfeld, Peter Morville, Jorge Arango: *Information Architecture*, 4th Edition, O'Reilly, 2015. ISBN: 978-1-4919-1168-6

**Important:** This syllabus, along with course assignments and due dates, are subject to change. It is the student's responsibility to check Canvas for corrections or updates to the syllabus. Any changes will be clearly noted in class, in a course announcement and/or through email.

# **Course description**

The goal of this course is to introduce the core concepts, techniques and tools for interaction design using a user-centered design process (UCD). After completing the course, you will:

- Appreciate the importance of the user-centered design process to the success product or service.
- Know how to identify user and business needs for an interactive product or service.
- Be able to document design requirements based on user needs and turn them into a practical interaction design concept.
- Be able to articulate the successful and unsuccessful aspects of an interaction design project.

## Course learning outcomes

Computing and New Media Technologies faculty members at UW-Stevens Point have developed a set of program competencies that define the Web Development (WD) major. No single WD course can cover all the competencies in detail, but the combined courses within the major meet all these goals. This course is designed to help you meet the following program competencies:

- Design Knowledge and Skills: Achieve an industry-standard level of knowledge and skills in human-centered design and assessment of digital media (aligns with Course Objectives #1, #2, #3)
- Technical Knowledge and Skills: Achieve an industry-standard entry level of competence in tools and techniques used in human-technology interaction (aligns with Course Objective #3)
- 3. Interdisciplinary Knowledge and Skills: Demonstrate an ability to contribute to, and act as the end user's advocate across, all disciplines involved in a professional digital development team (aligns with Course Objectives #2, #4, #5)
- 4. Contextual Knowledge and Values: Demonstrate the ability to identify and shape digital artifact development based on human-centered cultural, technical, and ethical issues (aligns with Course Objectives #1, #2, #4)
- 5. Personal Communication Skills: Demonstrate industry-standard communication skills throughout all phases of the digital artifact development process; including research, stakeholder interactions, results presentations, and team problem solving in both distance and face-to-face environments (aligns with Course Objectives #2, #4)
- 6. Life-Long Learning: Critically assess emerging trends and technologies in the field of digital media and constantly acquire new knowledge and skills applicable to that field (aligns with Course Objectives #1, #4).

### **Course objectives**

Upon completing this successfully, you will be able to:

- 1. Apply user-centered design process to practical interaction design work.
- 2. Design digital interactions appropriate for specific user needs and goals.
- 3. Produce key deliverables of the interaction design process using industry standard tools and techniques, including competitor analysis, requirements specification, personas, scenarios, wireframes, and prototypes.
- 4. Critically assess on the quality of one's own design projects, and those of other students and designers.
- 5. Collaborate with team members and stakeholders during the design process.

## **Course requirements**

Completing coursework awards a maximum total of 100 points. Specific coursework requirements and due dates will be announced in class and Canvas, along with further instructions. It is your responsibility to check Canvas for assignments and material distributed in class.

### **Graded activities**

- Homework and in-class assignments: 30 points. Each assignment is valued points commensurate with the scope of the work required.
  - Assignments are designed to help you familiarize with the concepts and practice the methods and techniques introduced in course materials.
  - Unless teamwork is specifically permitted in assignment instructions, you are required to complete the assignment yourself without outside assistance.
- Course project: 40 points. The course project consists of several steps valued separately.
  - The course project supports you in demonstrating your competence in applying the knowledge and skills gained during class.
  - O You will design a product or service concept that addresses specific user needs.

- Exams and quizzes: 30 points. This course includes a midterm and a final exam. Additional guizzes will be scheduled periodically.
  - Quizzes and exams will assess your ability to describe, explain and apply the key topics and concepts discussed in course materials.
  - Quizzes and exams will cover the assigned readings and content introduced in class.

### Viewing grades in Canvas

Points you receive for graded activities will be posted to Canvas. Online grades are updated once a grading session has been completed – typically within 4-5 business days following the completion of an activity.

### Software requirements and file storage

There are no specific software requirements on this course. The software used during this course will be either freely available online, available in the UWSP Software Center or installed in labs.

Storage media (e.g., flash drive or external hard drive) or cloud-based storage (e.g., Microsoft OneDrive) will be useful to store and transport the files created during this course.

## **Grading scale**

The final grades will be determined as a percentage of points earned out of 100 points according to the following scale:

Grades	Percentage	Grades	Percentage	Grades	Percentage
Α	94.00% - 100.00%	B-	83.99% - 81.00%	D+	70.99% – 68.00%
A-	93.99% - 91.00%	C+	80.99% - 78.00%	D	67.99% <b>–</b> 64.00%
B+	90.99% - 88.00%	С	77.99% – 74.00%	F	< 64%
В	87.99% - 84.00%	C-	73.99% - 71.00%		

The instructor reserves the right to revise the grade cutoffs to be more generous if necessary, based on overall class performance.

# Late policy

Coursework must be submitted by the given deadline or an extension must be requested from the instructor **before the due date**. If you know ahead of time that you will have a legitimate reason for missing a due date, contact the instructor to discuss an extension.

Coursework that is turned in late will receive a 20% reduction in points awarded. Submissions that are more than 3 days late will receive 0 points.

The instructor reserves the right to adjust this policy to account for extraordinary situations, such as documented illness or medical emergencies. You are required to inform the instructor as soon as possible of such situations.

#### **Attendance**

Attending class will likely be the single most important factor in determining your performance and grade in the course, so plan to attend every class. The relationship between attendance and achievement in education has been extensively documented in peer-reviewed research. I am not able to re-teach the material to you if you are absent, but you can ask a classmate to share notes.

• Excused absences: If you need to miss a class, notify the instructor via email no later than by the morning of the class meeting in question.

- The following constitute legitimate reasons to be absent from class: religious observance, military service obligations, pregnancy, illness and medical appointments.
- Documentation is not required for absences for the above reasons unless you will end up missing more than two consecutive class meetings.
- Making up missed in-class work, such as exams and assignments, is allowed only for excused absences. Coursework needs to be completed within 7 days of the original due date, unless otherwise agreed upon in writing with the instructor.
- In case of extenuating circumstances, such as personal or medical emergencies, you should contact the instructor as soon as possible discuss arrangements for making up missed coursework.
- If you have any questions or concerns regarding the attendance policy, your first point of
  contact should be the instructor. If you are unable to reach the instructor, or if you are
  experiencing a personal or medical crisis/emergency, you should contact the Office of the
  Dean of Students at <a href="mailto:dos@uwsp.edu">dos@uwsp.edu</a> or (715) 346-2611.

#### Absences due to military service

You will not be penalized for class absence due to unavoidable or legitimate required military obligations, or medical appointments at a VA facility, not to exceed two (2) weeks unless special permission is granted by the instructor. You are responsible for notifying faculty members of such circumstances as far in advance as possible and for providing documentation to the Office of the Dean of Students to verify the reason for the absence. The faculty member is responsible to provide reasonable accommodations or opportunities to make up exams or other course assignments that have an impact on the course grade. For absences due to being deployed for active duty, please refer to the Military Call-Up Instructions for Students.

### Other policies

#### Submitting coursework

All coursework must be submitted electronically through Canvas, unless otherwise instructed.

#### **Teamwork**

Some of the coursework activities will be completed in teams of 2-3 students. Each member of the group is responsible for completing the assigned work to the best of their ability.

For each coursework activity carried out as a group, the groups are required to submit a work plan with the instructor. The work plan details the responsibilities of each group member in completing the coursework. The work plan may be used as the basis for grading and conflict resolution.

#### Nondiscrimination

You may be asked to review and provide feedback on the work created by your peers. When doing so, please remember that the objective is to critique the work, not the person.

It is the policy of the University of Wisconsin-Stevens Point to:

- Foster an environment of respect for the dignity and worth of all students, employees, and guests of the university; Provide an environment which is conducive to the free and open exchange of ideas; and Strive to eliminate bias, prejudice, discrimination, and harassment in all forms and manifestations.
- Discrimination based on an individual's age, race, color, religion, sex, gender identity or expression, national origin, ancestry, marital status, pregnancy, parental status, sexual orientation, disability, political affiliation, arrest or conviction record, membership in the National Guard, state defense force or any other reserve component of the military forces of the United States or this state, or other protected class status is demeaning to all students, employees, and guests; impairs the process of education; and violates individual rights.

Dropping/withdrawing from the course

It is the student's responsibility to understand when they need to consider un-enrolling from a course. Refer to the <u>UWSP Academic Calendar</u> for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons include, but are not limited to, the following: documented and severe physical/mental illness/injury to the student or student's family. Please consult the instructor at the earliest opportunity to discuss the need to drop the course after the mandated deadline.

Incomplete policy

Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if inability to complete the coursework was due to a documented illness/injury or other circumstance beyond the student's control. All incomplete course assignments must be completed by the end of Semester II 2019-2020.

### **Accommodations**

UWSP is committed to providing reasonable and appropriate accommodations to students with disabilities and temporary impairments. 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 as soon as possible. DATC can be reached at (715) 346-3365 or DATC@uwsp.edu

## Student academic disciplinary procedures

#### **UWSP 14.01 Statement of principles**

The board of regents, administrators, faculty, academic staff and students of the university of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the university of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards must be confronted and must accept the consequences of their actions.

#### UWSP 14.03 Academic misconduct subject to disciplinary action

- (1) Academic misconduct is an act in which a student:
  - a. Seeks to claim credit for the work or efforts of another without authorization or citation:
  - b. Uses unauthorized materials or fabricated data in any academic exercise;
  - c. Forges or falsifies academic documents or records;
  - d. Intentionally impedes or damages the academic work of others;
  - e. Engages in conduct aimed at making false representation of a student's academic performance; or
  - f. Assists other students in any of these acts.
- (2) Examples of academic misconduct include, but are not limited to:
  - a. cheating on an examination;
  - collaborating with others in work to be presented, contrary to the stated rules of the course;
  - c. submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another;
  - d. submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas;
  - e. stealing examinations or course materials;
  - f. submitting, if contrary to the rules of a course, work previously presented in another course:
  - g. tampering with the laboratory experiment or computer program of another student;

h. knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

Use of third-party content and work previously presented in another course Specific allowances for using content created by others are explained in the coursework instructions. Standard citation and acknowledgment practices apply when using third party content, such as text, images, video, and program code. If in doubt, consult the instructor in advance.

Submitting work previously presented in another course is not allowed, unless approved by the instructor in writing.

### **Emergency preparedness**

In the event of a medical emergency call 9-1-1 or use Red Emergency Phone located near B238. Help if trained and willing to do so. Guide emergency responders to victim.

In the event of a tornado warning, proceed to the lowest level interior room without window exposure in the basement of the Science building. See <u>floor plans</u> showing severe weather shelters on campus. Avoid wide-span structures (gyms, pools or large classrooms).

In the event of a fire alarm, evacuate the building in a calm manner. Meet at the entrance of the Health Enhancement Center across the street from the Science building. Notify instructor or emergency command personnel of any missing individuals.

**Active Shooter/Code React – Run/Escape, Hide, Fight.** If trapped hide, lock doors, turn off lights, spread out and remain quiet. Call 9-1-1 when it is safe to do so. Follow instructions of emergency responders. See <a href="UW-Stevens Point Emergency Procedures"><u>UW-Stevens Point Emergency Procedures</u></a> for details on all emergency response at UWSP.

# Tentative class schedule

**Important Note:** This schedule is subject to change. Refer to the Canvas course calendar and assignment details for specific due dates for coursework. If you have any questions, please contact the instructor.

Veek	Topics	Coursework due
01	Syllabus review Interaction design; user-centered design process	
02	Overview of design research: understanding the domain, client and user needs	
03	Stakeholder and subject matter expert interviews Competitor analysis	Assignment 1: Questions for stakeholder interview
04	Conducting user research: interviews and sobservation	Assignment 2: Summarize stakeholder interview findings  Quiz 1
05	Modeling user research findings: constructing personas and defining user goals	Project checkpoint 1: Document design research findings  Assignment 3: Create a draft of the enduser interview procedure
06	Modeling user research findings: scenario development	Project checkpoint 2: Submit interview transcriptions
07	Requirements analysis and documentation	Assignment 4: Analyze end-user interview findings
08	Design framework overview	✓ Midterm exam  B Assignment 5: Develop scenarios of use
09	Overview of information architecture (IA) and methods Understanding users' information needs	Project checkpoint 3: Create personas and scenarios  Assignment 6: Extract project requirements from user research data
10	Designing product content: organization schemes and structures Project progress review	Project checkpoint 4: Project progress review presentation (design requirements)
11	Documenting and testing the design framework: wireframing and prototyping	Assignment 7: Design main navigation structures
12	Designing labeling and navigation systems	/ Quiz 2
13	Designing for search and browsing Thanksgiving	Assignment 8: Wireframe content layouts
14	Designing for accessibility	Assignment 9: Accessibility review
15	Project presentations	Project checkpoint 5: Project design documentation and presentation
16	Final exam period	✓ Final exam

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