HTI 100 – Innovation for People and Computers (3 credits)

Section 3

Semester I 2018-2019

Introduction to the field of human-computer interaction (HCI) and the innovative process. Includes current and historical aspects of HCI with an emphasis on psychology and sociology in an increasingly technology-driven society.

Course information

Class meetings

Tuesdays & Thursdays, 12:30 PM - 1:45 PM, SCI D228

Final exam time

Wednesday, December 19, 10:15 AM - 12:15 PM

Instructor

Tomi Heimonen, PhD

Office location

B235, Science Building

Email Telephone theimone@uwsp.edu

Communication

(715) 346-2356

You are encouraged to contact me if you have any questions. When

communicating via email, please add "HTI 100" on the subject line.

Office hours

Mondays and Wednesdays, 12:00 PM - 3:00 PM

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

Class website

http:///www.uwsp.edu/d2l

Desire2Learn (D2L) 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

There are no prerequisites for this course.

Textbooks

The following required textbooks are available at Text Rental:

- Don Norman: The Design of Everyday Things, Revised and Expanded Edition, Basic Books, 2013. ISBN: 978-0-465-05065-9
- Jenny Preece, Yvonne Rogers and Helen Sharp: Interaction Design: Beyond Human-Computer Interaction, Wiley, 4th edition. ISBN: 978-1-119-02075-2

Important: This syllabus, along with course assignments and due dates, are subject to change. It is the student's responsibility to check D2L 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

HTI 100 is a foundational course in the Web Development (WD) major (formerly Human-Technology Interaction). This course explores the creation of innovative products, technologies and services through a survey of topics in human-computer interaction (HCI) and a hands-on innovation project. We will examine the human-centered design process as foundation for successful innovation, including the understanding of users' characteristics, needs, and goals, and the communication of design solutions.

By the end of the semester, you will be able to:

- Develop ideas for improving and/or creating a new service based on identified user
- Turn your ideas into a user-focused, innovative product concept that considers human capabilities, limitations and ethical challenges in interaction design.

 Demonstrate your product concept to your peers and provide constructive feedback on the designs of other students.

Course learning outcomes

This is a Social Sciences designated course in the General Education Program (GEP). The credits you receive in this course will help satisfy UW-Stevens Point's GEP requirements.

UW-Stevens Point GEP Social Sciences learning outcomes:

- 1. Explain or apply major concepts, methods, or theories used in the social sciences to investigate, analyze, or predict human behavior.
- 2. Examine and explain how social, cultural, or political institutions influence individuals or groups.

Course objectives

Upon completing this course, you will have:

- Summarized key developments in interactive computing technology and their effect on how people interact with technology (Social Sciences outcome #2).
- Identified key characteristics of human cognition, memory and perception that affect interaction design (Social Sciences outcome #1).
- Explained how human abilities and disabilities affect how people use technology (Social Sciences outcome #1).
- Described key legal and ethical issues related to the design of interactive technologies (Social Sciences outcome #2).
- Developed and documented ideas for innovative products and services (Social Sciences outcome #1).

Course requirements

Completing coursework awards a maximum total of 100 points.

Specific requirements for each graded course activity will be announced separately in D2L.

Graded activities

- Assignments: Assignments award a total of 20 points.
 - Each course assignment will be valued separately as designated in its documentation.
 - 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: The course project awards a total of 30 points.
 - The course project supports you in demonstrating your competence in applying the knowledge and skills gained during class.
 - You will ideate and design an innovative product or service concept that addresses specific user needs.
- Exams and quizzes: Online quizzes and exams award a total of 45 points.
 - Periodic online quizzes and exams will assess your ability to describe, explain and apply the key topics and concepts discussed in course materials.
 - Exams and quizzes will cover the assigned readings and content introduced in class.
- Attendance: Active attendance of class meetings awards a total of 5 points.
 - Refer to the Attendance policy below for more details.

Viewing grades in D2L

Points you receive for graded activities will be posted to the D2L Grade Book. Online grades are

updated once a grading session has been completed - typically within 4-5 work days following the completion of an activity. You will see a visual indication of new grades in D2L.

Software and hardware requirements

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 will be useful to store and transport the files created during this course. Note that the classroom does not have individual computer workstations, so plan accordingly.

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% - 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 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 in the event that you are absent, but you can ask a classmate to share notes.

- You can have up to three unexcused absences during the semester. Additional unexcused absences will result in a reduction of 0.2 points each, for a maximum of 5 points.
- Unexcused absences: Not attending class, being more than 20 minutes late to class or leaving 20 minutes early without prior approval will result in an unexcused absence.
- 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
 miss more than two (2) consecutive class meetings.

- Making up missed in-class work, such as exam, quizzes, assignment reviews and project presentations, is allowed for excused absences only. Coursework needs to be completed within 7 days of the original due date.
- In case of extenuating circumstances, such as personal or medical emergencies, you should contact the instructor as soon as possible to 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 dos@uwsp.edu 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 D2L**, unless otherwise instructed. When working in groups, for grading purposes each group member must submit the coursework to D2L, unless otherwise instructed.

Teamwork

Some of the coursework activities will be completed in teams of 3-4 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 2018-2019.

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:
 - 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;
 - b. 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.

Please note that originality checking by Turnitin.com is integrated in D2L and it may be used to review any writing assignment(s) you submit.

Emergency preparedness

In the event of a medical emergency call 9-1-1 or use Red Emergency Phone located near B338. Offer assistance 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

http://www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx for floor plans 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 UW-Stevens Point Emergency Procedures at http://www.uwsp.edu/rmgt/Pages/em/procedures for details on all emergency response at UWSP.

Tentative course schedule

Schedule is subject to change.

Week	Topics	Coursework due		
01	Syllabus review Interaction design, usability and user experience			
02	Human-centered innovation – designing novel products for people's needs History of human-technology interaction			
03	Methods for gathering and recording ideas			
04	Methods for innovation and ideation	Assignment 1: Technology use reflection		
05	Conceptual models and metaphors – Defining the design concept	Quiz 1 (D2L)		
06	Cognition, memory and thinking – how people understand the world			
07	Accessibility – making technology usable by all Project review	Course project: Initial design concept		
08	Social interaction	Midterm exam (D2L)		
09	Emotional interaction			
10	Interaction types – how people interact with technology	Assignment 2: Designing for people with disabilities		
11	Interface types – how products present themselves to users			
12	How innovation is regulated – Intellectual property and licensing	Quiz 2 (D2L)		
13	Ethical aspects in technology design			
14	Course wrap-up; TBA	Course project: Final design concept		
15	Project presentations / peer review			
16	Final exam period	Final exam (D2L)		

Important Note: Refer to the D2L course calendar and dropbox details for specific due dates for coursework. If you have any questions, please contact the instructor.