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

#### Section 2

#### 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

This course is offered 100% online via D2L.

Final exam time

Final exam will be administered via D2L during the finals week.

Instructor

Tomi Heimonen, PhD

Office location

B235, Science Building

**Email** 

theimone@uwsp.edu

Telephone

(715) 346-2356

Communication

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

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

Office hours

Mondays and Wednesdays, 12:00 PM - 3:00 PM in D2L chat or face to

face in my office.

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, 4<sup>th</sup> 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 needs.
- 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.
- 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

- Discussions: Discussions award a total of 15 points.
  - Weekly D2L group discussions provide you an opportunity to ask questions, demonstrate you have acquired sufficient knowledge, and engage with your classmates.
- Assignments: Assignments award a total of 15 points.
  - Each course assignment will be valued separately as designated in its documentation.
  - Assignments are designed to help you familiarize with and practice the concepts, methods and techniques introduced in class materials.
  - Unless teamwork is specifically permitted in coursework instructions, you are required to complete the assignments yourself without outside assistance.
- Course project: The course project awards a total of 20 points.
  - By completing the project, you will demonstrate your competence in applying the knowledge and skills gained during class to 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 50 points.
  - o Online quizzes and exams will be scheduled periodically to assess your understanding of the course materials.
  - Exams and quizzes will cover the assigned textbook readings and content introduced in course materials.

#### 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. You may find it more convenient to utilize your own desktop or laptop computer than competing coursework in public computer labs. Refer to UWSP Information Technology for recommended computer configurations: <a href="https://www.uwsp.edu/infotech/Pages/Purchasing/Recommended-Windows-Laptop-and-Apple-MacBook-Configurations.aspx">https://www.uwsp.edu/infotech/Pages/Purchasing/Recommended-Windows-Laptop-and-Apple-MacBook-Configurations.aspx</a>.

The course is offered fully online and a high-speed internet connection is needed to access course materials in D2L and on the Web.

## **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 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/participation policy

Active participation in the course will likely be the single most important factor in determining your performance and grade, so plan to complete all assigned course activities in a timely fashion.

- If you are unable to participate in required course activities for an extended period of time due to religious observance, military service obligations, pregnancy, illness or medical appointments, notify the instructor via email in advance as soon as practical.
- Documentation is **not required** unless you are unable to participate in class activities for more than one (1) week.
- If you have any questions or concerns regarding this 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 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;
  - 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.

### Tentative course schedule

Schedule is subject to change.

Week	Topics	Coursework due
01	Syllabus review	Discussion: Introduction post
	Interaction design, usability and user experience	
02	Human-centered innovation – designing novel products for people's needs	Discussion: Week 1 & 2
	History of human-technology interaction	
03	Methods for gathering and recording ideas	Discussion: Week 3
04	Methods for innovation and ideation	Assignment 1: Technology use reflection
		Discussion: Week 4
05	Conceptual models and metaphors - Defining	Quiz 1 (D2L)
	the design concept	Discussion: Week 5
06	Cognition, memory and thinking – how people understand the world	Discussion: Week 6
07	Accessibility – making technology usable by all	Course project: Initial design
	Project check-in / peer review period (D2L)	concept
00	On this to see the	Discussion: Week 7
08	Social interaction	Midterm exam (D2L) Discussion: Week 8
09	Emotional interaction	Discussion: Week 9
10	Interaction types – how people interact with technology	Assignment 2: Designing for people with disabilities Discussion: Week 10
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11	Interface types — how products present themselves to users	Quiz 2 (D2L) Discussion: Week 11
12	How innovation is regulated – Intellectual property and licensing	Discussion: Week 12
13	Ethical aspects in technology design	Discussion: Week 13
14	ТВА	Course project: Final design concept
		Discussion: Week 14
15	Project peer review period (D2L)	Discussion: Reflection
16	Final exam period	Final exam (D2L)
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**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.