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

Semester I 2016-2017

Course information

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.

Class meetings	Tuesdays & Thursdays, 2:00PM - 3:15PM, SCI B348
Final exam time	Friday, December 16, 10:15-12:15AM
Instructor	Tomi Heimonen, PhD
Office location	B235, Science Building
Email	theimone@uwsp.edu
Telephone	(715) 346-2356
Communication	You are encouraged to contact me (email preferred) regarding the course if you have any questions. When communicating via email, please preface the subject line of your email with "WDMD 100".
	I also encourage you to post questions on D2L on issues pertaining to class activities and assignments so that the whole class can be made aware of pertinent information.
Office hours	Mondays and Wednesdays, 10:00AM – 12:00PM, and by appointment.
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 texts will be used in this course. Textbooks are available for rent or purchase in online bookstores.
	Don Norman: *The Design of Everyday Things, Revised and Expanded Edition*, Basic Books, 2013. ISBN: 0-465-05065-4
	Jenny Preece, Yvonne Rogers and Helen Sharp: *Interaction Design: Beyond Human-Computer Interaction*, Wiley, 4th edition. ISBN: 978-1-119-02075-2

Important Note: 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 a course announcement or through email.

Course overview

This course explores the creation of innovative products, technologies and services through a survey of human-computer interaction (HCI) and hands-on innovative projects. We'll be looking at the human-centered design process, including the understanding of users' characteristics, needs, and goals, sketching and other ideation methods, and presentation of the design artifacts.

This is the introductory course within the Web and Digital Media Development (WDMD) major. During this course, we will explore how humans feel, think and perceive, and how they interact with each other, with and through technology. We will survey the history of HCI, from the first computer mouse and graphical user interface to current virtual reality headsets, and the legal and ethical aspects of designing digital products.

By the end of the semester, you will be able turn your ideas into product concepts and demonstrate them to others.

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.

Below you will see how this course aligns with the Social Sciences learning outcomes.

Course objectives

Upon completing this course, students will be able to:

1. Describe the key developments and milestones in the history of interactive technologies and how they affected society. (*Social Sciences Learning Outcome #2*)
2. Recognize the key characteristics of human cognition, memory and experience and how these affect the design of digital products. (*Social Sciences Learning Outcome #1*)
3. Apply human-centered design methods to generate, develop and document ideas for interactive products and services. (*Social Sciences Learning Outcome #1*)

You will meet the outcomes listed above through a combination of the following activities:

- Familiarizing yourself with the major concepts, methods and theories of human-computer interaction by reviewing assigned reading materials and completing homework and in-class assignments.
- Applying knowledge and skills gained during class to design a concept for an interactive technology product or service.

Grading policy

Graded course activities

Completing coursework awards a maximum total of 100 points.

Assignments and homework: Each homework problem and assignment will be valued separately as designated in its documentation (40 points total). Homework and assignments help you familiarize with and practice the concepts, methods and techniques introduced in the readings and other course materials. You should bring homework solutions to class and be prepared to demonstrate them on request.

Course project: The course project awards a total of 40 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.

Exams and quizzes: In-class exams and/or online quizzes will be scheduled periodically to assess your understanding of the course materials (20 points total). Exams and quizzes will cover the assigned textbook readings and content introduced in course materials.

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

Grading scale

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

Grades	Percentage	Grades	Percentage	Grades	Percentage
A	100 – 94.00%	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%	C	77.99 – 74.00%	F	< 64%
B	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.

Late policy

All coursework for this course will be submitted electronically through D2L unless otherwise instructed. Required materials must be submitted by the given deadline or special permission must be requested from instructor *before the due date*.

Coursework (assignments, homework and projects) that is turned in more than 2 hours after the time it is due will receive a 20% late penalty on the grade. Submissions that are more than 5 days late will receive an automatic grade of 0 points. **It is not possible to make up missed exams without prior approval.**

The instructor reserves the right to adjust this rule 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 but **at most within five working days of the due date** in question. 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.

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 2-3 days following the completion of an activity. You will see a visual indication of new grades posted in D2L.

Course policies

Participation

Students are expected to complete all course activities as outlined in this syllabus and in D2L to earn a passing grade. You are expected to check your UWSP email and the course D2L instance daily to keep up-to-date on course related announcements.

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that we can help you find a solution.

You may also 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. Criticism or discrimination against a person based on gender, race, ethnic background, religion, or sexual orientation will be subject to the University's disciplinary procedures and will also result in deduction of points on the course. For more information on the university's discrimination policy, see http://www.uwsp.edu/dos/Pages/Discrimination%20Policy.aspx

Completing coursework
You will complete a variety of coursework during this course, which help you gain a deeper understanding of the topics discussed in class.

All coursework requirements and due dates will be announced in class and D2L, along with further instructions. It is your responsibility to check D2L for assignments and material distributed in class. All coursework will be turned in via D2L.

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

Teamwork
Many 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 file a work plan with the instructor. The work plan will detail the responsibilities of each group member in completing the coursework. The work plan will be used as the basis for grading and conflict resolution.

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 UWSP Academic Calendar 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 2016-2017.

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 Application 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 B348 classroom does not have individual computer workstations, so plan accordingly.

Technology use in class
Cell phones and other mobile devices may not be used in class for activities other than those related to the class, such as trying out demos and new technologies on your phone or tablet.

If you wish to record (audio or video) the class meetings, please consult the instructor first.

Accommodations

If you have a documented disability and verification from the Disability and Assistive Technology Center and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to Disability

Services and meet with a Disability Services counselor to request special accommodation before classes start.

The Disability and Assistive Technology Center is located in 609 Learning Resource Center and can be contacted by phone at (715) 346-3365 (Voice) / (715) 346-3362 (TDD only) or via email at datctr@uwsp.edu.

Statement of policy

UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. The modifications should not affect the substance of educational programs or compromise academic standards; nor should they intrude upon academic freedom. Examinations or other procedures used for evaluating students' academic achievements may be adapted. The results of such evaluation must demonstrate the student's achievement in the academic activity, rather than describe his/her disability.

If modifications are required due to a disability, please inform the instructor and contact the Disability and Assistive Technology Center in 609 LRC, or (715) 346-3365.

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: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; 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; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; 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.

Specific allowances for using third party content are explained in the coursework instructions. Standard citation and acknowledgment practices apply when utilizing third party content, such as text, images, video, and program code. If in doubt, consult the instructor in advance.

Religious beliefs

Relief from any academic requirement due to sincerely held religious beliefs will be accommodated according to UWS 22.03. Students need to notify the instructor within the first week of the beginning of classes of the specific days or dates on which he or she will request relief from an examination or academic requirement.

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 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 schedule

Week 1: Syllabus review, Introduction to the course

Week 2: Interaction design, Usability and user experience

Week 3: Conceptual models, Metaphors – What the system can do

Week 4: Types of interaction – How people can interact with products

Week 5: Cognition, Mental models – How people understand the world

Week 6: Social interaction

Week 7: Emotional interaction

      Midterm exam

Week 8: History of HCI – How we got to the Oculus Rift and iPhone from first computers

Week 9: Types of interfaces

Week 10: Human-centered design – Designing products that meet people's needs

Week 11: Gathering and recording ideas

Week 12: Introduction to sketching methods (Thanksgiving week)

Week 13: Innovation and ideation

Week 14: Accessibility, Ethical aspects of design

Week 15: Project presentations

Week 16: Final exam period

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