

Stevens Point, WI 54481-3897 (715) 346-4409; Fax (715) 346-4260

# WDMD 346 – Usability Evaluation Methods (3 credits)

#### Semester | 2016-2017

## Course information

Examine key concepts, methods and tools for evaluating the usability and user experience of interactive products.

Class meetings

Mondays & Wednesdays, 1:00PM - 2:15PM, SCI A224

Final exam time

Wednesday, December 21, 08:00-10:00AM

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 346".

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** 

No prerequisites

**Textbook** 

The following required text will be used in this course. It is available for

rent or purchase in online bookstores.

Carol M. Barnum: Usability Testing Essentials: Ready, Set... Test!, 1st

Edition, Morgan Kaufmann, 2010. ISBN: 978-0123750921

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 learning outcomes

This course provides an introduction to usability evaluation and user research methodology, including the following topics:

- Selecting the appropriate evaluation method(s);
- Planning a usability study of a product or service;
- Conducting the study, including participant recruitment, screening and research ethics;
- Analyzing, reporting and presenting usability study results.

## **Course objectives**

Upon completing this course, students will be able to:

- Describe the strengths and limitations of key usability evaluation methods.
- Perform and analyze usability studies on products and services using multiple complementary methods.
- Create evaluation reports that effectively communicate the important insights gained from the study.

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

- Familiarize yourself with concepts, methods and tools of usability evaluation by reviewing assigned materials and completing homework and in-class assignments.
- Applying knowledge and skills gained during class to evaluate the usability and user experience of interactive products.

## **Grading policy**

#### Graded course activities

Completing coursework awards a maximum total of 1000 points. Grading for this course emphasizes the learning of practical evaluation skills.

Homework and in-class assignments: Each homework problem and in-class assignment will be valued separately as designated in the documentation (200 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 600 points. By completing the project, you will demonstrate your competence in applying the knowledge and skills gained during class to plan, conduct, analyze and report usability evaluation studies.

**Exams and quizzes:** In-class exams and/or online quizzes will be scheduled periodically to assess your understanding of the course materials (100 points total). Exams and quizzes will cover the assigned textbook readings and content introduced in course materials.

**Seminar presentation:** The semester will conclude in a mini-seminar where students will give presentations of usability evaluation methods not otherwise covered in class (100 points). The instructor will provide a list of topics to choose from but students are also encouraged to come up with their own topics. In addition to their own talk, each student will be asked to act as an opponent to another student's presentation.

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

#### Grading scale

The final grades will be determined according to the following scale:

| Grades | Percentage     | Grades | Percentage     | Grades | Percentage     |
|--------|----------------|--------|----------------|--------|----------------|
| Α      | 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% | 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.

## 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 (homework, assignments and the final project) 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 outline 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 will 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 <a href="http://www.uwsp.edu/dos/Pages/Discrimination%20Policy.aspx">http://www.uwsp.edu/dos/Pages/Discrimination%20Policy.aspx</a>

#### **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 D2L, along with further instructions. It is your responsibility to check D2L for assignments and material distributed in class. All course related homework, assignments, and the final project 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.

#### **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. We will be using a variety of software products to record and view usability tests. The software 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. You should bring homework solutions to class and be prepared to demonstrate them on request.

#### 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.

## **UWSP** academic honesty policy & procedures

## 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;
  - 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 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.

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 **911** or use red emergency phone located outside of the Public Science Hall Lab (B238). 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

In the event of a fire alarm, evacuate the building in a calm manner. Meet at the grassy area near the Chemistry Biology building construction site. Notify instructor or emergency command personnel of any missing individuals.

Active Shooter – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Call 911 when it is safe to do so. Follow instructions of emergency responders.

See UW-Stevens Point Emergency Management Plan at <a href="http://www.uwsp.edu/rmgt">http://www.uwsp.edu/rmgt</a> for details on all emergency response at UW-Stevens Point.

## Tentative schedule

**Important Note:** Refer to the D2L course calendar and Dropbox details for specific due dates for coursework. Activity and assignment details will be explained in detail within each week's corresponding learning module. If you have any questions, please contact your instructor.

| Week | Content   |  |  |  |
|------|---|--|--|--|
| 01   | Syllabus review, introduction to course   |  |  |  |
| 02   | Overview of usability and UX evaluation methods and user research                                   |  |  |  |
| 03   | User-centered design process; usability inspection methods: expert reviews and heuristic evaluation |  |  |  |
| 04   | Usability inspection methods (continued): checklists, automated inspection/evaluation tools         |  |  |  |
| 05   | Testing with users: types and goals of testing, how to plan a usability test                        |  |  |  |
| 06   | Testing with users: testing early and often: Wizard-of-Oz testing and paper prototypes              |  |  |  |
| 07   | Testing with users: participant recruitment, test facilitation; Morae hands-on                      |  |  |  |
| 80   | Testing with users: coding and analyzing data   |  |  |  |
| 09   | Presenting test results; remote evaluation; UserTesting.com hands-on                                |  |  |  |
| 10   | Measuring physiological response – biometrics & eye-tracking; Mirametrix hands-on                   |  |  |  |
| 11   | Questionnaires and surveys  |  |  |  |
| 12   | Questionnaires and surveys, using online survey tools, Qualtrics hands-on                           |  |  |  |
| 13   | Evaluating the usage of an existing system; Google Analytics hands-on                               |  |  |  |
| 14   | User research ethics  |  |  |  |
|      | Presentations   |  |  |  |
| 15   | Presentations   |  |  |  |
| 16   | Presentations   |  |  |  |