

Modulbeschreibung Master of Science Angewandte Psychologie Arbeits- Organisations- und Wirtschaftspsychologie

Course title	User-Centered Design and Usability Testing			
Code				
Degree course	Angewandte Psychologie <input type="checkbox"/> Bachelor <input checked="" type="checkbox"/> Master			
Module group	Fachliche Vertiefung: Sicherheit und Zuverlässigkeit			
Module typus (see explanation at the end of this document)	<input type="checkbox"/> Pflichtmodul <input checked="" type="checkbox"/> Wahlpflicht			
Level of study (see explanation at the end of this document)	<input type="checkbox"/> Basic <input type="checkbox"/> Intermediate <input type="checkbox"/> Advanced <input checked="" type="checkbox"/> Specialised			
ECTS-Credits	3			
Time investment	<i>Total</i>	<i>Contact hours</i>	<i>Guided self-study</i>	<i>Individual self-study</i>
	90	24	60	6
Cycle	Every year in autumn			
Lecturer	Prof. Dr. Fred van den Anker and Dr. Serge Petralito			
Contact	fred.vandenanker@fhnw.ch			

<p>Learning outcome/skills*</p>	<p>Professional Competence (Fachkompetenz) This course supports</p> <ul style="list-style-type: none"> • the development of practical analysis, design and evaluation skills, covering different phases of the user-centered design process (e.g. context analysis, user needs and requirements elicitation, usability evaluation/ testing) • the acquisition of knowledge of <ul style="list-style-type: none"> ○ the complex interrelationship between people, technology and organization and how to deal with it in design ○ how to apply psychological knowledge to human-centered design ○ how to do design-oriented work or context analysis ○ how to work out design concepts into concrete use scenarios that users can easily understand ○ how to derive user needs and requirements ○ how to plan, conduct, and analyze usability evaluations, specifically usability tests, in a systematic way ○ different qualitative and quantitative methods for usability testing and which methods to apply depending on your goal. <p>You do not need any technical knowledge to participate.</p> <p>Methods Competence (Methodenkompetenz)</p> <ul style="list-style-type: none"> • you will gain knowledge of a variety of user-centered design and evaluation methods with a focus on context analysis, scenario development, user needs and requirements elicitation and usability testing. • in doing context and user needs and requirements analysis as well as usability testing you will develop your observation and interviewing skills. • you will improve your analytical skills through the analysis of data generated in the practical exercises we run through. • creativity is required in working out a design concept. <p>Self-Competence (Selbstkompetenz)</p> <ul style="list-style-type: none"> • working independently on a concrete design task and • developing a concrete design concept in limited time. • conscientiousness is practiced by planning and conducting a usability test in a systematic way. <p>Social Competence (Sozialkompetenz)</p> <ul style="list-style-type: none"> • you will improve your team-working skills. • you will have the chance to improve your English-speaking skills.
--	--

<p>Learning content</p>	<p>In this course, we practice various user-centered design and evaluation methods, covering different phases of the user-centered design process. You will</p> <ul style="list-style-type: none"> • do field observation and learn how to use field data to model user activities and “contexts of use” as a basis for design • learn how to make a design concept concrete by developing use scenarios (concrete visions of future system/ product use) • carry out evaluation of technology-mediated change, by taking into account a variety of psychological aspects and stakeholder perspectives • elicit user needs and requirements (functional, ergonomical, personal and organizational). • conduct a usability evaluation by planning, conducting and analyzing a usability test (e.g. of a website or some other product). <p>The above analysis and design activities (group work) are carried out on the basis of a concrete design case. For the usability evaluation part, we will choose a concrete application for usability testing. You also may use the school’s usability laboratory for usability testing.</p>
<p>Teaching and learning methods</p>	<ul style="list-style-type: none"> • lectures on user-centered design and usability testing principles and methods • training/ instruction on how to apply these methods • practical work (group work with individual preparation) • feedback, reflection and discussion on the results produced in the exercises • literature on user-centered design and usability evaluation/ testing. <p>The course supports active learning by individual and group exercises.</p> <p>A minimum of 80% attendance is required in order to pass the module (our meetings are also used partly for group work). Attendance is registered.</p>

Language of instruction	<p>English</p> <p>The seminar offers the opportunity to improve your English-speaking skills (speaking English is not obligatory, you can ask questions and do group work and presentations in German). Since speaking English gets more and more common in organizations, this is an important skill to be acquired during your studies.</p>
Assessment and grading scale	<p>Results of the group work, in the form of (two) group reports.</p> <p>Grading: two group reports, one on a concrete design case involving context analysis, scenario-based design and evaluation/ user needs and requirements elicitation (the subjects of the first three meetings) and a second group report on the usability testing part of the course (the last three meetings). The results of both reports will be averaged to produce the final grade.</p> <p>x 6er Skala <input type="checkbox"/> 2er Skala</p>
Bibliography	<p>Literature will be provided shortly before and during the course.</p>
Pre-requisite module(s)	<p>None</p>
Distinction to the Bachelor*	<p>Compared with the bachelor course on <i>Usability</i> this course</p> <ul style="list-style-type: none"> • deals with all stages of the user-centered design process, i.e. analysis, design and evaluation • takes a broader, “contextual” or work and organizational psychological perspective on creating usable and useful tools and • offers more in-depth know-how by putting a variety of user-centered design and evaluation methods to practice (e.g. contextual inquiry, scenario-based design, usability testing). <p>Compared to the bachelor course on <i>Product and Service Design</i>, this course provides much more depth concerning practices and methods for user-centered design and product testing, offering much more hands-on experience and practical skills.</p>
Connection to other modules	
Remarks	<p>A minimum of 80% attendance is required in order to pass the module (our meetings are also used partly for group work). Attendance is registered.</p> <p>For questions you can contact me by Email fred.vandenanker@fhnw.ch</p>

LEGENDE

*Level *Studienniveau	<p>B Basic level (Modul zur Einführung in das Basiswissen eines Gebiets)</p> <p>I Intermediate level (Modul zur Vertiefung der Basiskenntnisse)</p> <p>A Advanced level (Modul zur Förderung und Verstärkung der Fachkompetenz)</p> <p>S Specialised level (Modul zum Aufbau von Kenntnissen und Erfahrungen in einem Spezialgebiet)</p>
*Type * Typus	<p>C Core course/Pflichtmodule (Kerngebiet eines Studienprogramms)</p> <p>R Related course/Wahlpflichtmodule (Unterstützung des Kerngebiets mit Vermittlung von Vor- oder Zusatzkenntnissen)</p>
*Abgrenzung zum Bachelor	Abgrenzung des Moduls zu ähnlichen Bachelormodulen hinsichtlich Inhalt und Niveau
* Selbststudium	<p>Beim «begleiteten Selbststudium» erteilen Dozierende den Studierenden Lern- und Arbeitsaufträge, die in der Regel in einem direkten Zusammenhang mit den Zielen eines Moduls stehen.</p> <p>Das «individuelle Selbststudium» deckt die Lernzeit ab, die für die individuelle Vor- und Nachbereitung von Inhalten, die in Kontaktveranstaltungen präsentiert wurden, aufgewendet werden muss. Die Studierenden arbeiten dabei in eigener Verantwortung, ohne dass dafür ein spezieller Arbeitsauftrag erteilt wird. Diese Zeit dient neben dem individuellen Durchgehen des Stoffes und dem Klären von Verständnisschwierigkeiten insbesondere auch der Prüfungsvorbereitung. (Quelle: Begleitetes Selbststudium und Selbststudium an FH, http://www.phzh.ch/MAPortrait_Data/53733/15/CSPC-Dossier%2004-2008.pdf)</p>
<p>*Lernziele/ Kompetenzen</p> <p>> Welche Kompetenzen sollen Studierende im Modul erwerben?</p> <p>> Kompetenzen als Lern-ziele beschreiben (die Studierenden erwerben, kennen, verstehen, können beurteilen ...)</p>	<p>Fachkompetenz <i>Erwerb verschiedener Arten von Wissen und kognitiven Fähigkeiten:</i></p> <ul style="list-style-type: none"> > Grund- und Spezialwissen aus dem eigenen Fachgebiet und den zugehörigen Wissenschaftsdisziplinen > Allgemeinbildung, die in Beziehung zum eigenen Fachgebiet gesetzt werden kann <p>Methodenkompetenz <i>Kenntnisse, Fertigkeiten und Fähigkeiten, die es ermöglichen, Aufgaben und Probleme zu bewältigen, indem sie die Auswahl, Planung und Umsetzung sinnvoller Lösungsstrategien ermöglichen. Dazu gehören z.B. Problemlösefähigkeit, Transferfähigkeit, Entscheidungsvermögen, abstraktes und vernetztes Denken sowie Analysefähigkeiten, effiziente Arbeitstechniken.</i></p> <p>Selbstkompetenz <i>Fähigkeiten und Einstellungen, in denen sich die individuelle Haltung zur Welt und insbesondere zur Arbeit ausdrückt. Selbstkompetenz geht hoch über "Arbeitstugend" hinaus, da es sich um allgemeine Persönlichkeitseigenschaften handelt, welche nicht nur im Arbeitsprozess Bedeutung haben. Dazu gehört z.B. Flexibilität, Leistungsbereitschaft, Ausdauer, Zuverlässigkeit, Engagement und Motivation</i></p> <p>Sozialkompetenz <i>Kenntnisse, Fertigkeiten und Fähigkeiten, die dazu befähigen, in den Beziehungen zu Mitmenschen situationsadäquat zu handeln. Neben Kommunikations- und Kooperationsfähigkeit gehören auch dazu Konfliktfähigkeit, Teamfähigkeit, Rollenflexibilität, Beziehungsfähigkeit und Einfühlungsvermögen.</i></p>