

Subdivided Module Catalogue for the Subject

Digital Humanities

as a Master's with 1 major with the degree "Master of Arts" (120 ECTS credits)

Examination regulations version: 2011

Responsible: Faculty of Arts, Historical, Philological, Cultural and Geographical

Studies

Responsible: Institute of German Studies



Course of Studies - Contents and Objectives

Students of Digital Humanities learn the application of computer-supported procedures and the systematic use of digital resources in humanities and cultural sciences. This subject has an interdisciplinary orientation, and its representatives are distinguished by a traditional training in humanities and cultural sciences as well as by their familiarity with a series of relevant concepts, procedures and standards in information technology. Typical research and work areas include: digitization, digital editions and corpora, formal modelling of knowledge in humanities and cultural sciences, quantitative text analysis, visualisation of complex data structures, digital libraries, development and use of digital tools for humanists, theories of digital media.



Abbreviations used

Course types: $\mathbf{E} = \text{field trip}$, $\mathbf{K} = \text{colloquium}$, $\mathbf{O} = \text{conversatorium}$, $\mathbf{P} = \text{placement/lab course}$, $\mathbf{R} = \text{project}$, $\mathbf{S} = \text{seminar}$, $\mathbf{T} = \text{tutorial}$, $\ddot{\mathbf{U}} = \text{exercise}$, $\mathbf{V} = \text{lecture}$

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: A = thesis, LV = course(s), PL = assessment(s), TN = participants, VL = prerequisite(s)

Conventions

Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Notes

Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should the module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with

the general regulations governing the degree subject described in this module catalogue:

ASP02009

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

15-Jul-2013 (2013-86)

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.



The subject is divided into

Abbreviation	Module title	ECTS credits	Method of	page				
			grading					
Compulsory Courses (70 EC	Compulsory Courses (70 ECTS credits)							
04-DH-G1-112-m01	Creating Digital Objects 1	5	B/NB	5				
04-DH-G2-112-m01	Creating Digital Objects 2	5	NUM	6				
04-DH-H1-112-m01	Practice of Digital Objects 1	5	B/NB	7				
04-DH-H2-112-m01	Presenting Digital Objects 2	5	NUM	8				
04-DH-l1-112-m01	Practice of Digital Objects 1	5	B/NB	9				
04-DH-l2-112-m01	Practice of Digital Objects 2	5	NUM	10				
04-DH-J1-112-m01	Processing and analyzing Digital Objects 1	5	NUM	11				
04-DH-J2-112-m01	Processing And Analyzing Digital Objects 2	5	B/NB	12				
04-DH-K1-112-m01	Managing Digital Objects 1	5	B/NB	13				
04-DH-K2-112-m01	Managing Digital Objects 2	5	NUM	14				
04-DH-L1-112-m01	Modelling Digital Objects 1		B/NB	15				
04-DH-L2-112-m01	Modelling Digital Objects 2	5	NUM	16				
04-DH-M-112-m01	Project in Digital Humanities	10	B/NB	17				
Compulsory Electives (20 E	CTS credits)							
10-I-ADS-102-m01	Algorithm and data structures	10	NUM	24				
10-I-PP-102-m01	Practical Course in Programming	10	B/NB	25				
o6-MK-MedInf1-102-mo1	Computer Science in Media 1	6	NUM	22				
o6-MK-MedInf2-102-mo1	Computer Science in Media 2	6	NUM	23				
o6-MCI-Einf-101-m01	Introduction to Human-Computer Interaction	5	NUM	19				
o6-MCS-EinfEr-	Introduction to Erganomics	_	NILIAA	20				
gon-132-mo1 Introduction to Ergonomics		5	NUM	20				
o6-MCS-Usab-101-mo1 Usability and Software Ergonomics		10	NUM	21				
Thesis (30 ECTS credits)								
04-DH-MA-112-m01	Master Thesis in Digital Humanities	30	NUM	18				



Module	Module title Abbreviation					
Creating Digital Objects 1					04-DH-G1-112-m01	
Module	e coord	linator		Module offered by		
		Chair of Digital Humanitie	es and German Lite-		nanities and German Literature of	
		Modern Period		the Modern Period		
ECTS		od of grading	Only after succ. con	npl. of module(s)		
5	(not)	successfully completed				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
		thods of creation and ma kup methods.	nagement of digital o	bjects and their pre	sentation. Sophisticated techni-	
Intende	ed lear	ning outcomes				
		able to create and annota ency and sustainability.	ite digital objects and	d to select and use a	ppropriate standards with re-	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	in)	
S (no ir	nforma	tion on SWS (weekly cont	act hours) and cours	e language available	e)	
		sessment (type, scope, la			ation offered — if not every seme-	
		nation (approx. 60 minut entation (approx. 15 minu			ome (4 out of 6, approx. 2 pages ages)	
Allocat	ion of	places				
Additio	nal inf	ormation				
Worklo	ad					
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
	Master's degree (1 major) Digital Humanities (2011)					



Module	Module title Abbreviation					
Creating Digital Objects 2 04-DH-G2-112-n					04-DH-G2-112-m01	
Module	e coord	inator		Module offered by		
		Chair of Digital Humanitie	es and German Lite-		nanities and German Literature of	
		Nodern Period		the Modern Period		
ECTS		od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio		Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
		thods of creation and ma kup methods.	nagement of digital o	bjects and their pre	sentation. Sophisticated techni-	
Intende	ed lear	ning outcomes				
		able to create and annota	te digital objects and	d to select and use a	ppropriate standards with re-	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	ın)	
S (no ir	nforma	tion on SWS (weekly cont	act hours) and cours	e language available	2)	
		sessment (type, scope, la ion on whether module ca			tion offered — if not every seme-	
term pa	aper (a	pprox. 15 to 20 pages)				
Allocat	ion of	olaces				
Additio	nal inf	ormation				
Worklo	ad					
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
						
Module appears in						
Master	Master's degree (1 major) Digital Humanities (2011)					



Module title Abbreviation					Abbreviation	
Practice of Digital Objects 1					04-DH-H1-112-m01	
Module	coord	inator		Module offered by		
holder	of the (Chair of Digital Humanitie	es and German Lite-	Chair of Digital Hun	nanities and German Literature of	
		Modern Period	1	the Modern Period		
ECTS		od of grading	Only after succ. con	ıpl. of module(s)		
5		successfully completed				
Duratio		Module level	Other prerequisites			
1 semes		graduate				
Conten						
Fundan using d			eraction (HCI), visuali	sation of informatior	n structures, presentation of texts	
Intende	ed lear	ning outcomes				
Student lar, for		able to develop and tech	nically implement vis	ualisation concepts	for digital objects and, in particu-	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	ın)	
S (no in	ıforma	tion on SWS (weekly cont	act hours) and cours	e language available	2)	
		sessment (type, scope, la ion on whether module ca			tion offered — if not every seme-	
		nation (approx. 60 minut entation (approx. 15 minu			ome (4 out of 6, approx. 2 pages ages)	
Allocati	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad		,			
Teachir	Teaching cycle					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module	Module appears in					
Master'	Master's degree (1 major) Digital Humanities (2011)					



Module	Module title Abbreviation					
Presenting Digital Objects 2					04-DH-H2-112-m01	
Module	e coordinator			Module offered by	<u> </u>	
holder	of the Chair of Digital	Humanitie	es and German Lite-	· · · · · · · · · · · · · · · · · · ·	nanities and German Literature of	
	of the Modern Period			the Modern Period		
ECTS	Method of grading		Only after succ. con	npl. of module(s)		
5	numerical grade					
Duratio			Other prerequisites			
1 seme	ster graduate					
Conten	ts					
	nentals of human-cor ligital media.	mputer inte	raction (HCI), visuali	sation of information	n structures, presentation of texts	
Intende	ed learning outcomes	5				
Studen lar, for		p and techr	nically implement vis	ualisation concepts	for digital objects and, in particu-	
Course	s (type, number of we	eekly conta	ct hours, language –	- if other than Germa	ın)	
S (no ir	nformation on SWS (v	veekly cont	act hours) and cours	e language available	e)	
	d of assessment (type formation on whethe				tion offered — if not every seme-	
term pa	aper (approx. 15 to 20	pages)				
Allocat	ion of places					
Additio	nal information					
Worklo	ad					
Teachi	ng cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
	Master's degree (2 majors) Digital Humanities (2012) Master's degree (1 major) Digital Humanities (2011)					



Module	Module title Abbreviation					
Practic	Practice of Digital Objects 1 04-DH-I1-112-mo1					
Module	e coord	linator		Module offered by		
		Chair of Digital Humanitie	os and Gorman Lito		nanities and German Literature of	
		Modern Period	s and German Lite-	the Modern Period	mainties and German Literature or	
ECTS	Meth	od of grading	Only after succ. con	pl. of module(s)		
5	(not)	successfully completed				
Duratio	on	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	its					
Applica	ation o	f complex software librari	es, advanced prograi	nming techniques.		
Intend	ed lear	ning outcomes				
Studen	its are	able to use complex softv	vare libraries and to i	ndependently devel	op problem solutions.	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	an)	
S (no ii	nforma	tion on SWS (weekly cont	act hours) and cours	e language available	e)	
Metho	d of as	sessment (type, scope, la	nguage — if other the	an German, examina	ntion offered — if not every seme-	
		ion on whether module ca			,	
		· • •		•	ome (4 out of 6, approx. 2 pages	
		entation (approx. 15 minu	tes) with written elab	oration (approx. 5 p	ages)	
Allocat	ion of	places				
Additio	nal inf	formation				
Worklo	ad					
Teachi	ng cycl	le				
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module appears in						
Master	Master's degree (2 majors) Digital Humanities (2012)					
Master	Master's degree (1 major) Digital Humanities (2011)					



Module	Module title Abbreviation					
Practic	Practice of Digital Objects 2				04-DH-l2-112-m01	
Module	e coord	inator		Module offered by		
holder	of the (Chair of Digital Humanitie	es and German Lite-	<u> </u>	nanities and German Literature of	
	of the N	Nodern Period		the Modern Period		
ECTS		od of grading	Only after succ. con	npl. of module(s)		
5	Щ.	rical grade				
Duratio		Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
Applica	ation of	complex software librari	es, advanced prograi	mming techniques.		
Intend	ed learı	ning outcomes				
Studen	its are a	able to use complex softv	vare libraries and to i	ndependently devel	op problem solutions.	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)	
S (no i	nformat	tion on SWS (weekly cont	act hours) and cours	e language available	2)	
		sessment (type, scope, la on on whether module ca			tion offered — if not every seme-	
term pa	aper (a _l	oprox. 15 to 20 pages)				
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
Teachi	Teaching cycle					
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module appears in						
Master	Master's degree (1 major) Digital Humanities (2011)					



Module	Module title Abbreviation					
Proces	sing an	nd analyzing Digital Obje	cts 1		04-DH-J1-112-m01	
Module	e coord	inator		Module offered by		
		Chair of Digital Humanitie Nodern Period	es and German Lite-	Chair of Digital Hun the Modern Period	nanities and German Literature of	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts		,			
Work o	n exem	plary research questions	using methods of th	e digital humanities	, analysis of digital objects.	
Intende	ed lear	ning outcomes				
Studen	its are a	able to answer research o	uestions using comp	outer-based methods	s and to analyse digital objects.	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	ın)	
S (no ir	nformat	tion on SWS (weekly cont	act hours) and cours	e language available	2)	
		sessment (type, scope, la			tion offered — if not every seme-	
term pa	aper (a _l	pprox. 15 to 20 pages)				
Allocat	ion of p	olaces				
Additio	nal inf	ormation				
Worklo	ad					
Teachi	ng cycl	e				
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)					
Module appears in						
	Master's degree (2 majors) Digital Humanities (2012)					
	Master's degree (1 major) Digital Humanities (2011)					



Modul	Module title Abbreviation					
Proces	sing Ar	nd Analyzing Digital Obje	ects 2		04-DH-J2-112-m01	
Modul	e coord	inator		Module offered by		
		Chair of Digital Humanitie Nodern Period	es and German Lite-	Chair of Digital Hun the Modern Period	nanities and German Literature of	
ECTS	Metho	od of grading	Only after succ. con	npl. of module(s)		
5	(not)	successfully completed				
Durati	on	Module level	Other prerequisites			
1 seme	ester	graduate				
Conte	nts					
Work o	n exem	plary research questions	using methods of th	e digital humanities,	, analysis of digital objects.	
Intend	ed lear	ning outcomes				
Studer	nts are a	able to answer research c	uestions using comp	outer-based methods	s and to analyse digital objects.	
Course	es (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)	
S (no i	nformat	tion on SWS (weekly cont	act hours) and cours	e language available	2)	
		sessment (type, scope, la			tion offered — if not every seme-	
		nation (approx. 60 minut entation (approx. 15 minu			ome (4 out of 6, approx. 2 pages ages)	
Alloca	tion of p	olaces				
Additio	onal inf	ormation				
	1					
Workle	oad		,			
Teachi	Teaching cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Modul	Module appears in					
	Master's degree (1 major) Digital Humanities (2011)					
(2-2-5)						



Modul	Module title Abbreviation					
Manag	ing Digital Objects 1			04-DH-K1-112-m01		
Modul	e coordinator		Module offered by	<u> </u>		
holder	of the Chair of Digital Humanit	ies and German Lite-	†	nanities and German Literature of		
	of the Modern Period		the Modern Period			
ECTS	Method of grading	Only after succ. con	npl. of module(s)			
5	(not) successfully completed					
Duratio		Other prerequisites	i			
1 seme	ster graduate					
Conter	ts					
	management, virtual research information systems.	environments, scient	ific content manager	ment systems, digital library and		
Intend	ed learning outcomes					
They a		nental principles of pr		s and research data repositories. anagement and are able to mo-		
Course	s (type, number of weekly con	act hours, language –	- if other than Germa	in)		
S (no i	nformation on SWS (weekly co	ntact hours) and cours	e language available	e)		
	d of assessment (type, scope, formation on whether module			ation offered — if not every seme-		
	examination (approx. 60 minu or presentation (approx. 15 min			ome (4 out of 6, approx. 2 pages ages)		
Allocat	tion of places					
Additio	onal information					
Worklo	pad					
Teachi	ng cycle					
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module appears in						
Master	Master's degree (2 majors) Digital Humanities (2012)					
Master	Master's degree (1 major) Digital Humanities (2011)					



Module title Abbreviation					Abbreviation		
Managing Digital Objects 2					04-DH-K2-112-m01		
Module	coord	inator		Module offered by			
		Chair of Digital Humanitie	es and German Lite-		nanities and German Literature of		
		Modern Period	T	the Modern Period			
ECTS		od of grading	Only after succ. con	npl. of module(s)			
5		rical grade					
Duratio		Module level	Other prerequisites				
1 seme	ster	graduate					
Conten	ts						
		gement, virtual research e ation systems.	environments, scienti	fic content managen	nent systems, digital library and		
Intende	ed lear	ning outcomes					
They ar	e also		ental principles of pro		s and research data repositories. anagement and are able to mo-		
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)		
S (no ir	format	tion on SWS (weekly cont	act hours) and cours	e language available	2)		
		sessment (type, scope, la ion on whether module ca			tion offered — if not every seme-		
term pa	aper (a _l	pprox. 15 to 20 pages)					
Allocat	ion of p	olaces					
Additio	nal inf	ormation					
Worklo	ad						
Teaching cycle							
							
Referre	Referred to in LPO I (examination regulations for teaching-degree programmes)						
							
	Module appears in						
Master's degree (1 major) Digital Humanities (2011)							



Module title Abbreviation						
Modelling Digital Objects 1					04-DH-L1-112-m01	
Module	coord	inator		Module offered by	<u> </u>	
		Chair of Digital Humanitie	es and German Lite-		nanities and German Literature of	
		Modern Period		the Modern Period		
ECTS		od of grading	Only after succ. con	npl. of module(s)		
5		successfully completed	 -			
Duratio		Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
Advanc	ed cor	cepts of data modelling,	evaluation of comple	ex digital objects.		
Intende	ed lear	ning outcomes				
Studen discipli		able to model digital obje	ects semantically and	assess them from th	ne perspective of a humanities	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	ın)	
S (no ir	nforma	tion on SWS (weekly cont	act hours) and cours	e language available	<u>e)</u>	
		sessment (type, scope, la			tion offered — if not every seme-	
		nation (approx. 60 minut entation (approx. 15 minu			ome (4 out of 6, approx. 2 pages ages)	
Allocat				(11)1	<u> </u>	
Additio	nal inf	ormation				
 Worklo						
	au					
Teachi	ng cycl	e				
Referred to in LPO I (examination regulations for teaching-degree programmes)						
 Module	e appea	ars in				
	Master's degree (2 majors) Digital Humanities (2012)					
	Master's degree (1 major) Digital Humanities (2011)					



Modul	Module title Abbreviation					
Model	ling Dig	ital Objects 2			04-DH-L2-112-m01	
Module	e coord	inator		Module offered by		
holder	holder of the Chair of Digital Humanities and German Literature of the Modern Period			Chair of Digital Hun	nanities and German Literature of	
			0	the Modern Period		
ECTS		od of grading rical grade	Only after succ. con	ipi. or module(s)		
5 Duratio		Module level	Other prerequisites			
1 seme		graduate	Other prefequisites			
Conter		Siddate				
Advand	ced con	cepts of data modelling,	evaluation of comple	ex digital objects.		
		ning outcomes	·	<u> </u>		
Studer discipl		able to model digital obje	cts semantically and	assess them from th	ne perspective of a humanities	
Course	s (type	, number of weekly conta	ct hours, language –	- if other than Germa	n)	
S (no i	nformat	ion on SWS (weekly cont	act hours) and cours	e language available	2)	
		sessment (type, scope, la on on whether module ca			tion offered — if not every seme-	
term p	aper (a _l	oprox. 15 to 20 pages)				
Allocat	tion of p	olaces				
Additio	onal inf	ormation				
Worklo	ad					
Teaching cycle						
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Modul	Module appears in					
Master	Master's degree (1 major) Digital Humanities (2011)					



Module	Module title Abbreviation					
Project	in Dig	ital Humanities			04-DH-M-112-m01	
Module	e coord	linator		Module offered by		
holder	holder of the Chair of Digital Humanities and German Lite-				nanities and German Literature of	
		Modern Period		the Modern Period		
ECTS		od of grading	Only after succ. con	npl. of module(s)		
10	(not)	successfully completed				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	graduate				
Conten	ts					
		lication of the knowledge arch project.	and skills developed	in the Bachelor's pr	ogramme Digital Humanities to a	
Intende	ed lear	ning outcomes				
		able to define a research ethods in appropriate ste		egratable methods t	to solve the problem and imple-	
Course	s (type	e, number of weekly conta	ict hours, language –	- if other than Germa	n)	
R (no ir	nforma	tion on SWS (weekly cont	act hours) and cours	e language available	<u>e)</u>	
		sessment (type, scope, la ion on whether module ca			tion offered — if not every seme-	
project	report	(approx. 10 to 15 pages)	and project result (pr	ogram, encoded dig	ital etc.)	
Allocat	ion of	places				
		<u> </u>				
Additio	nal inf	formation				
			•			
Worklo	ad					
Teachi	ng cycl	le				
Referred to in LPO I (examination regulations for teaching-degree programmes)						
Module	Module appears in					
Master	's degr	ree (2 majors) Digital Hum	nanities (2012)			
Master	Master's degree (1 major) Digital Humanities (2011)					



Modul	e title				Abbreviation	
Master Thesis in Digital Humanities					04-DH-MA-112-m01	
Module coordinator				Module offered by		
holder of the Chair of Digital Humanities and German Literature of the Modern Period			nities and German Lite-	Chair of Digital Humanities and German Literature of the Modern Period		
ECTS	Meth	od of grading	Only after succ. con	npl. of module(s)		
30	nume	rical grade				
Duratio	on	Module level	Other prerequisites	i		
1 semester graduate						
Contents						
Prepar	Preparation of an academically sound Master's thesis within a given time frame. In their thesis, students will					

Preparation of an academically sound Master's thesis within a given time frame. In their thesis, students will work on a research question in the digital humanities in a practical and application-oriented way. Depending on the topic of the thesis, students will be required to incorporate and discuss relevant theories, interdisciplinary relations as well as current research methods and to conduct a literature search.

Intended learning outcomes

Students develop the ability to independently explore a specific problem in the digital humanities within a given time frame. They formulate the research question, investigate it and then interpret, present and discuss their findings in an appropriate and application oriented way.

Courses (type, number of weekly contact hours, language — if other than German)

no courses assigned

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

written thesis (approx. 80 pages)

Allocation of places

--

Additional information

Additional information on module duration: 6 months.

Workload

--

Teaching cycle

--

Referred to in LPO I (examination regulations for teaching-degree programmes)

--

Module appears in

Master's degree (2 majors) Digital Humanities (2012)



Modul	e title	<u>'</u>		Abbreviation		
Introdu	uction t	o Human-Computer Int	eraction		o6-MCI-Einf-101-m01	
Modul	e coord	inator		Module offered by		
holder	holder of the Chair of Computer Science IX			Institute of Computer Science		
ECTS	Meth	od of grading	Only after succ. cor	npl. of module(s)		
5	nume	rical grade				
Duratio	Duration Module level		Other prerequisites			
1 seme	1 semester undergraduate					
Conten	Contents					

Human-computer interaction is concerned with the design, evaluation and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them. This course gives an introduction to the principle biological, physiological, and psychological constraints as defined by the human user and relates these constraints to the conceptual and technical solutions of today's computer systems and existing as well as prospective interaction metaphors between humans and computers. The course covers topics

in the area of human perception and cognition, memory and attention, the design of interactive systems, prominent evaluation methods, the principles of computer systems, typical input processing techniques, interface technology, and examples of typical interaction metaphors, from text-based input to graphical desktops to multimodal interfaces. Accompanying lab work will introduce students to typical tasks in this field, i. e. prominent evaluation methods and prototyping of interfaces.

Intended learning outcomes

At the end of the course, the students will have developed a broad understanding of the principles underlying the design of interfaces between human users and computer systems. They will understand the constraints and capabilities of current user interfaces, and they will have learned about the necessary steps involved in user-centred design and development approaches.

Courses (type, number of weekly contact hours, language — if other than German)

 $V + \ddot{U}$ (no information on SWS (weekly contact hours) and course language available)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

a) written examination (approx. 75 minutes) and presentation (approx. 10 minutes) and written elaboration (approx. 10 pages, ungraded) or b) written examination (approx. 75 minutes) and written elaboration (approx. 5 pages) and presentation (approx. 15 minutes)

Language of assessment: German or English

Allocation of places

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Additional information

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Workload

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Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Bachelor' degree (1 major) Human-Computer Systems (2010)

Master's degree (1 major) Business Information Systems (2013)

Master's degree (1 major) Media Communication (2014)

Master's degree (1 major) Media Communication (2013)



	Module title Abbreviation						
Introd	ntroduction to Ergonomics				o6-MCS-EinfErgon-132-mo1		
Modul	Module coordinator			Module offered b	oy		
holder	of the (Chair of Psychological E	rgonomics	Institute of Huma	an Computer Media		
ECTS		od of grading	Only after succ. com	ipl. of module(s)			
5	nume	rical grade					
Duration	on	Module level	Other prerequisites				
1 seme	ester	undergraduate					
Conter	ıts						
ge.		on control, perception, a ning outcomes	ttention, conceptualis	ation and languas	ge as well as memory and knowled-		
Germa	n inten	ded learning outcomes					
Die Studierenden erlangen Kenntnis über die Leistungsfähigkeit menschlicher Informationsverarbeitung und Handlungsfähigkeit welche eine wichtige Grundlage für die Gestaltung von Arbeitsumgebungen und Mensch-System-Schnittstellen ist. Die Studierenden können die physikalische, physiologische und informatorische Beanspruchung des Menschen in einer Arbeitsumgebung bewerten und durch Lösungsansätze aus der Ergonomie die Belastung gezielt steuern und ggf. begrenzen. Zugleich erwerben die Studierenden Grundlagenkenntnisse aus Teilgebieten der Psychologie, auf denen später im Studium aufgebaut wird.							
Courses (type, number of weekly contact hours, language — if other than German)							
V (no information on SWS (weekly contact hours) and course language available)							
		sessment (type, scope, lion on whether module o			nation offered — if not every seme-		
written examination (approx. 60 minutes)							

Language of assessment: German or English

Allocation of places

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Additional information

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Workload

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Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Master's degree (1 major) Media Communication (2014)

Master's degree (1 major) Media Communication (2013)



Modul	e title			Abbreviation	
Usability and Software Ergonomics					o6-MCS-Usab-101-m01
Module coordinator				Module offered by	
holder of the Chair of Psychological Ergo			gonomics	Institute of Human Computer Media	
ECTS	Meth	thod of grading Only after suc		compl. of module(s)	
10	nume	rical grade			
Durati	on	Module level	Other prerequisites		
1 seme	ester	undergraduate			
Contents					
		•	•	•	s for the evaluation of the usabi-

This module will acquaint students with analytical as well as empirical methods for the evaluation of the usability and user experience of interactive devices and will provide them with an opportunity to apply these. Having been introduced to these methods during the lecture, students will apply selected methods to examples during the exercise. In addition, students will independently evaluate two interactive devices in small teams; they will plan, conduct and analyse a usability evaluation, will critically compare different methods and will deliver a presentation on the results of their work.

Intended learning outcomes

German intended learning outcomes available but not translated yet.

Die Studierenden kennen analytische und empirische Methoden zur Usability-Evaluation Interaktiver Produkte und besitzen Fachkompetenz in der Planung, Durchführung und Auswertung von Usability-Evaluationen. Auch die Fähigkeit zur Arbeit in Teams wird ausgebildet.

Courses (type, number of weekly contact hours, language — if other than German)

V + Ü (no information on SWS (weekly contact hours) and course language available)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

presentation (approx. 20 minutes) and project report (approx. 12 pages) Language of assessment: German or English

Allocation of places

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Additional information

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Workload

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Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Bachelor' degree (1 major) Human-Computer Systems (2010)



Modul	e title		Abbreviation				
Compu	ıter Sci	ence in Media 1			o6-MK-MedInf1-102-mo1		
Modul	e coord	linator		Module offered by			
holder	holder of the Professorship of Media Informatics			Institute of Human Computer Media			
ECTS	Meth	od of grading	Only after succ. co	ompl. of module(s)			
6	nume	rical grade					
Durati	Duration Module level		Other prerequisite	Other prerequisites			
1 seme	1 semester undergraduate						
Contor	Contents						

Media computer science is an interdisciplinary field of teaching and research, dealing with various aspects of information processing in the context of digital media. The module *Medieninformatik 1* (*Computer Science for Media 1*) provides students with a fundamental knowledge and a practical overview of current digital media types.

Intended learning outcomes

Students are familiar with the central concepts of media informatics. They have a basic knowledge of information processing with a special focus on digital media.

Courses (type, number of weekly contact hours, language — if other than German)

V + T (no information on SWS (weekly contact hours) and course language available)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

a) written examination (approx. 60 minutes) or b) written examination (approx. 40 minutes) with exercises (40 hours), weighted 5:1 or c) oral examination of one candidate each (approx. 30 minutes) or d) presentation (15 to 30 minutes) with written elaboration (10 to 15 pages) or e) term paper (15 to 20 pages) or f) portfolio (maximum 20 pages)

Language of assessment: German, English

Allocation of places

Digital Humanities Master's (120 ECTS): maximum 10 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot.

Additional information

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Workload

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Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Bachelor' degree (1 major) Media Communication (2012)

Bachelor' degree (1 major) Media Communication (2010)

Master's degree (1 major) Digital Humanities (2011)



Modul	e title				Abbreviation	
Computer Science in Media 2					o6-MK-MedInf2-102-mo1	
Module coordinator				Module offered by	Module offered by	
holder	holder of the Professorship of Media Informatics			Institute of Human	Institute of Human Computer Media	
ECTS	Meth	od of grading	Only after succ. c	ompl. of module(s)		
6	nume	rical grade				
Duration Module level Ot		Other prerequisit	Other prerequisites			
1 seme	1 semester undergraduate					
Contor	Contents					

The module *Medieninformatik 2* (*Computer Science for Media 2*) provides deeper knowledge of digital media types and the fundamentals of digital media development and design.

Intended learning outcomes

Students have gained a deeper insight into selected concepts of media computer science. In addition, they are able to develop digital media based on various processes. Thus, a basis is provided for academic work as well as for acquiring practically relevant media skills.

 ${f Courses}$ (type, number of weekly contact hours, language — if other than German)

V + Ü (no information on SWS (weekly contact hours) and course language available)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

a) written examination (approx. 60 minutes) or b) written examination (approx. 40 minutes) with exercises (40 hours), weighted 5:1 or c) oral examination of one candidate each (approx. 30 minutes) or d) presentation (15 to 30 minutes) with written elaboration (10 to 15 pages) or e) term paper (15 to 20 pages) or f) portfolio (maximum 20 pages)

Language of assessment: German, English

Allocation of places

Digital Humanities Master's (120 ECTS): maximum 10 places. Places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot.

Additional information

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Workload

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Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

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Module appears in

Bachelor' degree (1 major) Media Communication (2012)

Bachelor' degree (1 major) Media Communication (2010)

Master's degree (1 major) Digital Humanities (2011)



Module title					Abbreviation	
Algorithm and data structures					10-I-ADS-102-m01	
Module coordinator				Module offered by		
Dean o	Dean of Studies Informatik (Computer Science)			Institute of Computer Science		
ECTS	Metho	od of grading	Only after succ. con	only after succ. compl. of module(s)		
10	nume	rical grade				
Duratio	n	Module level	Other prerequisites			
1 seme	ster	undergraduate	Admission prerequisite to assessment: exercises (type and scope to be			
	announced by the lecturer at the beginning of the course).			ing of the course).		

Design and analysis of algorithms, recursion vs. iteration, sort and search methods, data structures, abstract data types, lists, trees, graphs, basic graph algorithms, programming in Java.

Intended learning outcomes

The students are able to independently design algorithms as well as to precisely describe and analyse them. The students are familiar with the basic paradigms of the design of algorithms and are able to apply them in practical programs. The students are able to estimate the run-time behaviour of algorithms and to prove their correctness.

Courses (type, number of weekly contact hours, language — if other than German)

V + Ü (no information on SWS (weekly contact hours) and course language available)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3.

Allocation of places

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Additional information

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Workload

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Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

 \S 49 (1) 1. a) Informatik Theoretische Informatik, Algorithmen und Datenstrukturen

§ 69 (1) 1. a) Informatik Theoretische Informatik, Algorithmen und Datenstrukturen

Module appears in

Bachelor' degree (1 major) Computer Science (2010)

Bachelor' degree (1 major) Mathematics (2012)

Bachelor' degree (1 major) Mathematics (2013)

Bachelor' degree (1 major) Economathematics (2012)

Bachelor' degree (1 major) Computational Mathematics (2012)

Bachelor' degree (1 major) Computational Mathematics (2013)

Master's degree (1 major) Digital Humanities (2011)

First state examination for the teaching degree Realschule Computer Science (2012)



Module	e title	,	Abbreviation		
Practic	al Cour	se in Programming			10-I-PP-102-m01
Module	e coord	inator		Module offered by	
Dean o	f Studi	es Informatik (Computer	Science)	Institute of Computer Science	
ECTS	Metho	od of grading	Only after succ. compl. of module(s)		
10	(not)	successfully completed			
Duratio	Duration Module level		Other prerequisites		
1 seme	1 semester undergraduate		Admission prerequisite to assessment: exercises (type and scope to be		
announced by the lecturer at the beginning of the course).		ing of the course).			

The programming language Java. Independent creation of small to middle-sized, high-quality Java programs.

Intended learning outcomes

The students are able to independently develop small to middle-sized, high-quality Java programs.

Courses (type, number of weekly contact hours, language — if other than German)

P (no information on SWS (weekly contact hours) and course language available)

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module can be chosen to earn a bonus)

written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3.

Allocation of places

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Additional information

Additional information on module duration: 1 to 2 semesters.

Workload

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Teaching cycle

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Referred to in LPO I (examination regulations for teaching-degree programmes)

§ 49 (1) 1. c) Informatik Praktische Softwareentwicklung

§ 69 (1) 1. d) Informatik Praktische Softwareentwicklung

Module appears in

Bachelor' degree (1 major) Computer Science (2010)

Bachelor' degree (1 major) Mathematics (2012)

Bachelor' degree (1 major) Mathematics (2013)

Bachelor' degree (1 major) Computational Mathematics (2012)

Bachelor' degree (1 major) Computational Mathematics (2013)

Bachelor' degree (1 major) Aerospace Computer Science (2009)

Bachelor' degree (1 major) Aerospace Computer Science (2011)

Master's degree (1 major) Digital Humanities (2011)

First state examination for the teaching degree Realschule Computer Science (2012)