Module Handbook
Health Data and Digitalisation

Hochschule für Gesundheit
University of Applied Sciences

www.hs-gesundheit.de

Bachelor's Degree Programme (B.A.)

Dec. 2020

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Introductory note

1. The Module Handbook has been created by the degree programme coordinators or others who are responsible for the degree programme. It contains, for example, excerpts from the Subject-Specific Provisions of the degree programme "Health and Diversity at Work" (German: Fachspezifische Bestimmungen des Studiengangs “Gesundheitsdaten und Digitalisiierung”) (Part II of the Examination Regulations, German: Rahmenprüfungsordnung für Bachelorstudiengänge im Department of Community Health). In the Module Handbook, these sections are highlighted in grey colour and may only be modified by the release of a new examination regulation. In cases of doubt, only the information of the respectively valid and officially published version of the Subject-Specific Provisions shall apply. Apart from the Module Handbook, students are therefore advised to make themselves familiar with both the regulations of the relevant framework examination as well as the relevant Subject-Specific Provisions. These university statutes can be looked into on the websites of the university under the heading "Official Announcements".

2. Please note that changes to form and duration of the examination mentioned in the Module Handbook might be made for one single semester if the examination board informs the examination office of such change in text format at the latest four weeks before the beginning of a semester in which the examination is to take place (cf. Art. 3 Paragraph 2 Subject-Specific Provisions). Students are asked to observe the respective examination notices posted. Examination forms that have been changed on short notice will be posted there.

Undergraduate Study and Examination Plan "Health Data and Digitalisation" B.A.

Gu Di	Module GuDi 00	Type	1st Semester			2nd Semester			3rd Semester			4th Semester			5th Semester			6th Semester		
			WSH	PL	CP	WSH	PL	CP	WSH	PL	CP	WSH	PL	CP	WSH	PL	CP	WSH	PL	CP
01	Scientific Work and Research Methods	2L+2E	4	H	6															
02	Basics of Data Management	2L+2E	4	H	6															
03	Introductory Teaching Research Project	4P	4	K	6															
04	Basics of Health Sciences	2L+2S	4	M	6															
05	User Orientation and Participation	4S	4	H	6															
06	Quantitative Methods of the Health and Social Research	2L+2E				4	K	6												
07	Data Management and Big Data	2L+2E				4	K	6												
08	Medical Basics for Health Scientists	4L+2E				6	M	9												
09	Healthcare System and Health Economy	4L+2S				6	H	9												
10	Qualitative Methods of the Health and Social Sciences	2L+2E							4	H	6									
11	Data Protection and Data Security	2L+2E							4	K	6									
12	Ethics for Data and Health	4S							4	M	6									
13	Theories and Concepts of Diversity	4S							4	H	6									
14	Health Communication and Moderation	2S+2E							4	P	6									
15	Methods of Place –Related Data Analysis	2L+2E										4	H	6						
16	Digital Services for Health	1L+3S										4	K	6						

17	**Practical Study Phase**	2E										2	M	12						
18	**Interprofessional Cooperation**	2L+2S											M	6						
19	**Project and Quality Management**	2S													2	K	6			
20+ 21	**Optional Compulsory Modules**																			
20a	**Health Data and Diversity**	2S+3E													5	M	7			
20b	**Health Data and Users**	2S+3E													5	M	7			
20c	**Health Data and Healthcare System**	2S+3E													5	M	7			
20d	**Health Data and Environment**	2S+3E													5	M	7			
21a	**Health Data and Diversity**	2S+3E													5	M	7			
21b	**Health data and Users**	2S+3E													5	M	7			
21c	**Health Data and Social System**	2S+3E													5	M	7			
21d	**Health Data and Place**	2S+3E													5	M	7			
22	**Teaching Research Project**	2S+2E													4	H	10			
23	**Society and Digitalisation**	4S+2E																6	M	9
24	**Legal Foundations of the Healthcare System**	2L+2S																4	K	6
25	**Bachelor's Thesis and Colloquium**	4E																4	B	15

Study Course Plan
B.A. Health Data and Digitalisation

Semester	Method Competence	Data and Digitalisation Competence		Application-Related Health Knowledge		Social And Self-Competence
1st	GuDi 01: Scientific Work and Research Methods	GuDi 02: Basics of Data Management	GuDi 03: Introductory Teaching Research Project	GuDi 04: Basics of the Health Sciences		GuDi 05: User Orientation and Participation
2nd	GuDi 06: Quantitative Methods of Health and Social Research	GuDi 07: Data Management and Big Data		GuDi 08: Medical Basics for Health Scientists	GuDi 09: Healthcare System and Health Economy	
3rd	GuDi 10: Qualitative Methods of Health and Social Research	GuDi 011: Data Protection and Data Security	GuDi 12: Ethics for Data and Health	GuDi 13: Theories and Concepts of Diversity		GuDi 14: Health Communication and Moderation
4th	GuDi 15: Methods of Place–Related Data Analysis		GuDi 16: Digital Services for Health	GuDi 17: Practical Study Phase		GuDi 18: Interprofessional Cooperation
5th	GuDi 19: Project and Quality Management	GuDi 20: Compulsory Elective Area I "Data and Diversity" "Data and Users" "Data and the Healthcare System" "Data and Place"	GuDi 21: Compulsory Elective Area II: "Data and Diversity" "Data and Users" "Data and the Healthcre System" "Data and Place"		GuDi 25: Teaching Research Project	
6th			GuDi 23: Society and Digitalisation	GuDi 24: Legal Foundations of the Healthcare System	GuDi 25: Bachelor's Thesis and Colloquium	

blue modules = practice and project competence

<table>
<tr><th>Module: GuDi 01</th><th colspan="2">Title: Scientific Work and Research Methods</th></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Research Methods in the Context of Health (focus: quantitative methods)
Chair of Research Methods in the Context of Health (focus: qualitative methods)</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to define quality criteria of scientific working,
know how to write scientific papers and are familiar with the customary citation techniques used in science,
are able to represent the research methodology characteristics of health sciences and to derive the research methodologies of other disciplines,
are able to outline the work steps of scientific literature search.</td></tr>
<tr><td></td><td colspan="2">Skills: The students are able to
find, assess, understand and evaluate specialised literature and sources,
write and cite sources scientifically,
cite specialised literature and sources both formally correct and transparently,
narrow down a topic professionally, develop a scientific question, identify the literature needed to for study and process it within a given timeframe.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to discuss scientifically and to give constructive feedback,
are able to present, explain and defend results in a scientific context,
accept scientific quality criteria and feel obliged to comply with scientific standards,
are able to reflect research results critically.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students are able to
independently delimit a topic, identify research needs and develop a research question,
independently conduct a literature research as well as sources research according to scientific quality criteria,
independently write and formulate in a scientific manner.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Strategies and techniques of searching and procuring literature and sources
Practical use of common literature databases
Development of search strategies including the formulation of inclusion and exclusion criteria
Styles of citation
Scientific writing and phraseology
Planning and structuring of scientific work
Reflection of scientific honesty (transparency, plagiarism, forgery, etc.)
Written and oral preparation and presentation of results</td></tr>
</table>

Course type(s):	2 WSH lecture, 2 WSH exercise
Teaching methods:	Lecture, seminar group work with short talks
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a term paper in which the students prove that they are self-sufficiently capable of fulfilling the requirements concerning research instruments, as well as search, research and writing style of the health sciences. In addition, the students prove that they are competent to apply the rules of scientific working including citation and working with sources. Length: 12-15 pages Processing time: 6 weeks
Applicability of the module	• Basic module in the competence thread "Method Competence" • Recommendation: Completion of this module in the first semester.
(Basic) literature:	• Theisen, M. R. (2013). Wissenschaftliches Arbeiten Erfolgreich bei Bachelor- und Masterarbeit. 16th edition, Vahlen. • Kornmeier M. (2012). Wissenschaftlich schreiben leicht gemacht. Für Bachelor, Master und Dissertation. 4th edition, Haupt UTB. • Töpfer, A. (2010). Erfolgreich forschen: Ein Leitfaden für • Bachelor-, Master-Studierende und Doktoranden. 2nd edition, Springer.

<table>
<tr><td>Module: GuDi 02</td><td colspan="2">Title: Basics of Data Management</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Technologies</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td rowspan="4">Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to outline the basics of data management,
are able to name potentials of data relative to the development of structures of care provision (planning processes, prevention, diagnosis, therapy, medical knowledge management, patient empowerment),
are able to name and find fundamental databases for information resources of the health sciences and the healthcare system,
are capable of explaining the basic methods of data management.</td></tr>
<tr><td colspan="2">Skills: The students
are able to gain access to the databases of the health sciences and the healthcare system with regard to given questions, and systematically carry out searches and analyses there,
are able to select and apply adequate methods of data collection,
are in command of the imparted methods they need to model datasets,
are in command of tools to model data.</td></tr>
<tr><td colspan="2">Social competence: The students
are able to coordinate with the stakeholders of health data and develop joint concepts for a user-friendly health data management,
possess competences to conduct data collection/survey processes and are able to address and integrate relevant knowledge carriers to this end,
are capable of compiling data in team structures and achieve a consolidation of partially incomplete or contradictory data.</td></tr>
<tr><td colspan="2">Self-reliance: The students
are able to identify on their own data relevant to health issues and recognise their availability and/or necessary collection/survey,
are able to collect/survey data on their own for health-related issues, assess their relevance/quality etc. and evaluate them,
are able to independently create data models by using standard methods.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Basics and definitions
Collection methods / formats
Data model standards, reference data models used in the health sciences
Quality of datasets for evaluations
Data modelling and process modelling
Databases /DBMS
Datasets in the healthcare system & structured searches</td></tr>
<tr><td>Course type(s):</td><td colspan="2">2 WSH lecture, 2 WSH exercise</td></tr>
<tr><td>Teaching methods:</td><td colspan="2">Front-of-class teaching, (computer-supported) exercises, group work</td></tr>
</table>

Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a written examination in which the students are to remember and recall their fundamental knowledge of collecting, modelling and evaluating health-related data. In addition, they are supposed to be able to carry out searches in the data sources of the healthcare system, apply methods for data modelling, and be able to reflect both the potentials and the challenges of dealing health-related data. Duration: 90 minutes
Applicability of the module	• Basic module in the competence thread "Data and Digitalisation Competence" • Recommendation: Completion of this module in the first semester.
(Basic) literature:	• Gadatsch, A. (2017). Datenmodellierung für Einsteiger. Einführung in die Entity-Relationship-Modellierung und das Relationenmodell, Springer. • Haas, P (2006). Gesundheitstelematik, Springer. • Kuhn, J. (2006). Gesundheitsdaten verstehen, Huber Verlag. • Staud, J. (2005). Datenmodellierung und Datenbankentwurf. Ein Vergleich aktueller Methoden, Springer.

<table>
<tr><td>Module: GuDi 03</td><td colspan="2">Title: Introductory Teaching Research Project</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Place and Health</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
recognise relevant subtopics belonging to the field of health data and digitalisation,
name relevant data sources for analyses,
summarise the state of research of a subtopic belonging to the field of health data and digitalisation,
know various users of health data.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
apply scientific methods, in particular formulation of a research question, literature search, scientific writing and citation under supervision,
categorize various statements given on the same topic,
are able to collect their own data under supervision and evaluate secondary data under supervision,
are able to present work results and defend them in a discussion,
differentiate the meaningfulness of various data with regard to the question.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
possess the key competences of teamwork for coordination, presentation, moderation, discussion, keeping minutes, consensus building, and conflict solutions,
are aware of various perspectives of an object and are ready to consider them,
weigh various normative concepts related to the assignment to be processed.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to work on a current question with self-motivation and independently,
are in command of various learning and working strategies and are able to reflect them.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Working on an assignment cooperatively and using scientific methods under the direction of project attendants within a given timeframe
Subjects relate to current problems and offer the opportunity of cooperating with practice</td></tr>
<tr><td>Course type(s):</td><td colspan="2">4 WSH project study</td></tr>
<tr><td>Teaching methods:</td><td colspan="2">Seminar group work, front-of-class teaching, presentations</td></tr>
<tr><td>Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):</td><td colspan="2">The module examination consists of a joint oral examination. Individual achievements must be visible. Central issues of the project (objectives, methodical procedure, central findings, reflection of one's own work procedure) are presented and defended in the course of conversation.</td></tr>
</table>

	Duration: 30 minutes In addition, an ungraded study achievement has to be submitted. At the beginning of the semester, an exposé has to be created, intermediate results presented and a final report submitted. The exposé describes one's self-developed concretisation of the assignment and the question to be worked on. The intermediate presentation has to document the status of work progression which has been reached so far. The final report has to contain a consistent report including research question, methods/procedures, results and a reflection of one's own procedure.
Applicability of the module	• Basic module in the competence thread "Practice and Project Competence" • Recommendation: Completion of this module in the first semester
(Basic) literature:	• Eco, U. (2010). Wie man eine wissenschaftliche Abschlussarbeit schreibt. 13. Auflage. UTB. • Köckler, H. et al. (2018). Community Health. Ein zukunftsweisendes Themen- und Handlungsfeld etabliert sich in Deutschland. In: sicher ist sicher. 4(18) 198-199. • Lamker, C. (2014). Fallstudien. In: Materialien „Studien und Projektarbeit“. Heft 11. Studien- und Projektzentrum. Fakultät Raumplanung. TU Dortmund. • Further subject-related literature depending on the subject of the project

<table>
<tr><td>Module: GuDi 04</td><td colspan="2">Title: Basics of the Health Sciences</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Paediatric Health</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to name the theoretical basics of the health sciences and draw references to digitalisation,
describe comprehensibly the fields of application and the perspectives of the health sciences and their significance for health data and digitalisation,
are able to explain the models of basic structures of the healthcare system and its provision structures, and draw references to health data and digitalisation.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are able to assess the basic research results of the health sciences and draw conclusions from them on how to deal with health data,
analyse data and indicators which contain information about healthcare provision and derive from the various perspectives consequences for a needs-based provision,
are able to critically reflect perceptions derived from health scientific actions and thinking in their references to digitalisation,
are able to apply critical reflection of handling health data to one's own professional field of action while taking health-scientific matters into consideration.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
exchange information and views about the health-scientific significance of health data and discuss them against the background of societal, ethical and social political interactions,
receive empirical findings on the health problems of modern society and explain the significance of the associated qualitative and quantitative data,
are able to obtain a scientifically sound position toward the potentials and limitations of health data under health-scientific aspects in the course of occupational group-specific and cross-occupational group discussions.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are critically concerned with the existing data sources and indicators relating to the subject of health under quality aspects pertaining to healthcare provision,
gain access to further-reaching literature on the application and the limitations of health data in the health sciences and make themselves familiar with the current state of the discussion.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Development, theory, principles, fields of application, and perspectives of the health sciences in Germany
Determinants of health (e.g. gender, social inequality, environment)
Development of health inequality in the biography
Empirical findings regarding the health problems of modern societies</td></tr>
</table>

	• Chances and limitations of health data from the perspective of the health sciences • Prevention
Course type(s):	2 WSH lecture + 2 WSH seminar
Teaching methods:	Seminar group work, front-of-class teaching, presentations, practical examples
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a written examination in which the students are to recall and remember (unaided) the various theories and approaches of the health sciences. In addition, they must be able to apply these subjects to data-related real-life problems and reflect it on a professionally sound basis Duration: 90 minutes
Applicability of the module	• Basic module in the competence thread "Application-Related Health Knowledge " • Recommendation: Completion of this module in the first semester.
(Basic) literature:	• Gerhardus, A., Breckenkamp, J., Razum, O. & Schmacke, N. (ed.) (2010). Evidence-based Public Health. Huber. • Hurrelmann, K. (2012). Handbuch Gesundheitswissenschaften (5th edition). Beltz. • Schwartz, F.W., Walter, U., Siegrist, J., Kolip, P., Leidl, R., Dierks, M. et al. (ed.) (2012). Public Health. Gesundheit und Gesundheitswesen (3rd edition). Elsevier. • Siegrist, J., & Marmot, M. (ed.) (2008). Soziale Ungleichheit und Gesundheit. Erklärungsansätze und gesundheitspolitische Folgerungen. Huber

<table>
<tr><td>Module: GuDi 05</td><td colspan="2">Title: User Orientation and Participation</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Didactics</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are aware of the theoretical basics including the meanings and definitions of the terms 'user orientation' and 'participation' and are able to differentially describe the various models and health-scientific approaches which prioritise the users and/or the perspective of the users,
are able to describe the subjects of the module in a societal context with reference to health as the subject area,
are able to outline the social discourse on changed attitudes and requirements imposed on patients, clients and users.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are capable of applying the functions and principles of user orientation and participation to health-related aspects and concepts, depending on the individual case and/or situation,
are able to unfold the potentials of health data and digital applications to purposes of individual benefit,
are capable of recognising challenges for health aspects in the context of user orientation and participation, estimate limitations and assume critical positions,
are able to explain the concepts of participation and defend a well-founded professional position in the context of health data.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
feel that they are committed to user orientation and participation in the context of health,
are capable of empowering various user groups to develop and design the potentials of health data and digitalisation to suit their own interest,
are able initiate, lead and guide participation together with various target groups
are able to represent user interests toward experts and decision-makers and communicate the significance of user orientation and participation.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to differentiate and deepen acquired knowledge and developed skills on their own,
are able to apply their knowledge to inspire, accompany, further develop and evaluate user-oriented approaches and structures.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Perspectives of user orientation
Levels of participation
Concepts of participation and empowerment
Concepts of self-help and civil commitment in the health sector
Societal, institutional and structural framework conditions and aspects for user orientation and participation</td></tr>
</table>

	• Motives and participation • Individual resources, needs and challenges concerning social participation • Conceptualisation, execution and evaluation of participatory and user-oriented approaches and concepts
Course type(s):	4 WSH seminar
Teaching methods:	Seminar group work, front-of-class teaching, presentations, digital learning forms, discussion platforms, changes of perspective
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a term paper in which the students, starting out from a theoretical foundation, present a reasoned outline for a health-related user-oriented approach and for participation processes or a structural development for participatory processes. They present the extent of participation and thereby refer to the level sequence of participation. They explain the reasons of their considerations and refer to the user group by stating ethical reasons. In addition, in the term paper they reflect, for example, the resources, motives of the user group and take into view potential limitations regarding a specific context or a selected target group. They also present user-oriented objectives. Finally, the students describe the approach they have developed and reflect the potential outcomes for the users, the group and the structure of society. Length: 12-15 pages Time for preparation: 6 weeks
Applicability of the module	• Basic module in the competence thread "Social and Self-Competence"
(Basic) literature:	• Ewert, E. (2012). Vom Patienten zum Konsumenten? Nutzerbeteiligung und Nutzeridentitäten im Gesundheitswesen. Springer. • Mozygemba, K., Mümken, S., Krause, U., Zündel, M., Rehm, M., Höfling Engels, N., Lüdecke, D., Qurban, B. (ed.) (2009). Nutzerorientierung - ein Fremdwort in der Gesundheitssicherung? Huber. • Schaeffer, D. (2004). Der Patient als Nutzer. Krankheitsbewältigung und Versorgungsnutzung im Verlauf chronischer Krankheit. Huber. • Wright, M.T. (2016): Partizipation. Mitentscheidung der Bürgerinnen und Bürger. doi: 10.17623/BZGA:224-i084-1.0, (last updated on 16 Feb. 2016). • Garms-Homolova, V., Kardoff, E. von, Theiss, K., Meschnig, (ed.). (2008). Teilhabe und Selbstbestimmung von Menschen mit Pflegebedarf. Konzepte und Methoden. Konzeptionelle und methodische Überlegungen zu den Voraussetzungen. Mabuse-Verlag.

<table>
<tr><td>Module: GuDi 06</td><td colspan="2">Title: Quantitative Methods of Health and Social Research</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Research Methods in the Context of Health (Focus: Quantitative Methods)</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td rowspan="2">Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to name the central methods and methodology of quantitative health and social research,
are able to show how to develop and process a scientific problem,
are able toname the quantitative methods which are suited to answer the research question,
are able to state the work steps necessary for conducting an empirical study, applying statistical methods and evaluating and interpreting the results with regard to the research question.</td></tr>
<tr><td colspan="2">Skills: The students
are able to explain the essential differences between the various quantitative research methods, discuss and critically interpret them while considering quality criteria,
are capable to critically examine the quality criteria of quantitative research methods in the context of scientific studies,
are capable to apply the procedures as well as the survey and analysis methods of quantitative health and social research,
are able to understand, reflect and optimise the various principles of quantitative research methods with regard to interventions in the context of health and digitalisation,
are capable to plan and conduct empirical projects in the context of health and digitalisation, to evaluate the significance of empirical results and to present the latter.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are capable of dealing with the complexity of quantitative research and of communicating it adequately to those concerned,
are able to formulate quantitative research questions in the context of health-related services, explain and professionally substantiate to and discuss them with experts and laypersons, and finally present the interrelations in an intelligible manner,
are able to coordinate with experts from other disciplines the planning, implementation, analysis and interpretation of quantitative studies, constructively and specifically for those concerned,
are able to describe and explain in their fields of action the relevance of quantitative research to persons representing the sectors of health, education, social affairs and digitalisation.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to understand the application of various quantitative methods in the context of health data and digitalisation and to develop a professionally substantiated position,
are capable of applying various quantitative methods in the context of health and digitalisation,</td></tr>
</table>

	• are able to further educate themselves independently with regard to quantitative methods used in the context of health and social research, • are capable of defining their professional limitations and referring persons affected to the competent offices.
Subjects of the module:	• Quantitative research methods used in the scope of health and social sciences • Planning and execution of an empirical investigation • Statistical data analysis • Interpretation of results with regard to the research question and its integration into decision-making processes in the context of health and digitalisation • Presentation of results and drafting a report
Course type(s):	2 WSH lecture +2 WSH exercise
Teaching methods:	Seminar group work, front-of-class teaching, presentations, short talks, practical exercises
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a written examination in which the students are to recall and remember (unaided) the various theories and results of the quantitative methods of health and social research. In addition, they are supposed to be able to apply these theories and results to real-life problems and describe new research- and application-oriented tasks, define corresponding objectives and approaches to concrete solutions while reflecting their potential consequences. Duration: 90 minutes
Applicability of the module	• Module in the competence thread "Method Competence" • Builds on the subjects of GuDi01
(Basic) literature:	• Rasch, B., Friese, M., Hofmann, W., & Naumann, E. (2014). Quantitative Methoden 1: Einführung in die Statistik für Psychologen und Sozialwissenschaftler (4th edition). Springer. • Döring, N., & Bortz, J. (2016). Forschungsmethoden und Evaluation in den Sozial- und Humanwissenschaften (5th edition). Springer. • Weiß, C. (2013). Basiswissen Medizinische Statistik (6th edition). Springer.

<table>
<tr><td>Module: GuDi 07</td><td colspan="2">Title: Data Management and Big Data</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Technologies</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: The successful completion of Module GuDi02 is recommended.</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
remember strategies how to deal with huge distributed datasets in the healthcare system,
are aware of the development potentials of health provisions based on data analytics (personalised medicine, target-group orientation, new care provision models),
describe procedures to handle person-related health data,
are able to describe the sensitivity of health data.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are trained to evaluate huge and distributed datasets,
are capable of processing health data in a way that makes the data decision-relevant,
are able to conceptualise and realise projects to answer questions in a health-scientific context and on the basis of relevant data.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
develop a critical view to the reduction of inequality by an evaluation of health data,
are able to assess the consequences of measures derived from data evaluations on real-life worlds and are committed to a diversity-sensitive health-data management,
perceive the implications of data management for users and are able to weigh/determine whether dealing with data is ethical,
are able to process data and analytical results relating to health data and enter them purposefully into design and decision-making processes.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are capable of independently realising the relevance, the completeness and the data requirements related to given health-scientific questions,
recognise the necessity of relevant actor structures for health-related, data-driven questions and are capable of integrating them into a project structure.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Working with distributed datasets
Data migration/ -clearing
Semantic data integration
Data mining
Big Data applications
Methods of artificial intelligence on datasets
Methods of anonymisation /pseudonymisation
Meaningfulness/significance of data and its limitations</td></tr>
<tr><td>Course type(s):</td><td colspan="2">2 WSH lecture +2 WSH exercises</td></tr>
<tr><td>Teaching methods:</td><td colspan="2">Front-of-class teaching, (computer-guided) exercises, group work</td></tr>
</table>

Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a written examination in which the students are to recall and remember their knowledge of handling, in particular, huge, distributed health-related data either already existing or to be collected. They are supposed to prove that they are able to analyse datasets and reflect them with constructive criticism as concerns specific aspects (e.g. inequality, diversity-specific features, etc.). In addition, they are to present their knowledge of the tasks which must be considered in the scope of a project and be able to discuss all mentioned aspects concatenatingly in one context. Duration: 90 minutes
Applicability of the module	• Belongs to competence thread "Data and Digitalisation Competence" • Deepens the subjects of GuDi02
(Basic) literature:	• Langkafel, P. (2014). Big Data in Medizin und Gesundheitsforschung, medhochzwei Verlag. • Stiftung Datenschutz (2017). Big Data und E-Health. Erich Schmidt Verlag. • Rahm, E., Saake, G., Sattler, K.-U. (2015): Verteiltes und paralleles Datenmanagement, Springer.

<table>
<tr><td>Module: GuDi 08</td><td colspan="2">Title: Medical Basics for Health Scientists</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Public Health, Focus on Care Research</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 270 hours</td><td>of which is contact time: 90 hours</td></tr>
<tr><td>of which is self-study time: 180 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
know the basic terms of medical terminology, demography and epidemiology,
know the essential features and relevant methods and instruments of professional procedure ranging from prevention to therapy,
have knowledge of the pathophysiological basics of several selected relevant diseases,
know several reliable data and information sources in order to obtain medical information.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are able to explain and apply the basic terms of medical terminology, demography and epidemiology,
are able to operationalise several disease-related aspects based on their knowledge,
are capable of identifying the determinants of several selected diseases and analyse their correlations.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to exchange views on several diseases and discuss and present health-related data,
are capable of bringing their knowledge in the field of pathology in the respective contexts in a reflected and critical manner and, to this end, take part in the necessary scientific discussions,
enter into appropriate contact with various groups of persons who require information on various diseases.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
use scientific methods and apply them to selected questions,
are capable of analysing care provisions on the basis of epidemiological information and identifying necessary measures to improve the quality of care.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Medical terminology
Several selected diseases relevant in the context (description, epidemiology, prevention, diagnostics, therapy, rehabilitation)
Professional procedure including the handling and interpretation of health-related data
Basic terms of healthcare provision and treatment quality</td></tr>
<tr><td>Course type(s):</td><td colspan="2">4 WSH lecture +2 WSH exercises</td></tr>
<tr><td>Teaching methods:</td><td colspan="2">Seminar group work, front-of-class teaching, presentations</td></tr>
<tr><td>Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):</td><td colspan="2">The module examination consists of an oral examination in which the students are to recall and remember (unaided) facts, theories and concepts. In addition, they are supposed to be able to apply these subjects to real-life problems and describe new research- and application-oriented tasks, define corresponding objectives and approaches to concrete solutions while reflecting their potential consequences.</td></tr>
</table>

	Duration: 15 minutes
Applicability of the module	• Belongs to the competence thread "Application-Related Health Knowledge"
(Basic) literature:	• Schoppmeyer, M. (2018). Gesundheits- und Krankheitslehre (4th edition). Munich: Urban & Fischer. • Schwartz, F.W. et al. (ed.) (2012). Public Health (3rd edition). Munich: Urban & Fischer. • Weyerer, S. et al. (2008). Epidemiologie körperlicher Erkrankungen und Einschränkungen im Alter. Stuttgart: Kohlhammer. • Further current subject-specific sources (guidelines, special issue brochures, Healthcare Reports, etc.)

<table>
<tr><td>Module: GuDi 09</td><td colspan="2">Title: Healthcare System and Health Economy</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Economics and Health Politics</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 9 CP</td><td rowspan="3">Total work effort: 270 hours</td><td>of which is contact time: 90 hours</td></tr>
<tr><td>of which is self-study time: 180 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to indicate the central structures, institutions and actors of the healthcare system,
can name various organisational and design principles of healthcare systems,
are capable of identifying connections between the health economy and healthcare system,
are able to name the fundamental theories of health economics, especially with regard to special conditions pertaining to health objects and services.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are able to describe and rate selected examples of healthcare systems of various countries,
can analyse health-political reforms and organisational approaches and discuss their consequences,
are able to identify the bearers of political responsibility for the central challenges the healthcare system faces on the national, regional and communal level, respectively and outline their task spectrum,
are capable of recognising health-related problem situations, evaluate their health economic implications and derive concrete action requirements from them.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to assume scientifically substantiated position in occupational group-specific and multiprofessional discussions on questions related to the healthcare system and healthcare provisions, and participate in the development and further development of the healthcare system and healthcare provisions,
are able to use their health political and health economic knowledge in order to coordinate with decision-makers, cooperation partners and target groups,
based on their knowledge, can lead controversial health-political discussions, identify healthcare-political fields of action on the various levels of the healthcare system and communicate them to decision-makers, experts and laypersons.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to independently initiate and control discussion processes about reforms of the healthcare system,
can access lacking knowledge about interactions and structures in the healthcare system on their own,
are able to inform and further educate themselves about changes of the healthcare systems.</td></tr>
</table>

Subjects of the module:	• Introduction into health and social politics • Current and future challenges of the healthcare and social system • Approaches to control in healthcare systems • Healthcare systems in Germany and in an international comparison • Actors, interests and target conflicts in the healthcare system • Collective and selective-statutory structures of healthcare service provisions • Healthcare industry • Innovations in the healthcare industry • Introduction into health economics
Course type(s):	2 WSH lecture +2 WSH seminar
Teaching methods:	Seminar group work, front-of-class teaching, presentations, group discussions
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a term paper in which the students are supposed to select from the various topics of healthcare and social politics as well as health economics one topic to work on. The students are to narrow down the topic and develop a research-inspiring question. As a result, the students shall write a scientific paper based on a structured literature search. Length: 18-20 pages Time for preparation: 9 weeks
Applicability of the module	• Belongs to the competence thread "Application-Related Health Knowledge" • Builds on GuDi04
(Basic) literature:	• Breyer / Zweifel / Kifmann (2013): Gesundheitsökonomik – 6th completely extended and revised edition, Berlin / Heidelberg: Springer Gabler. • Hajen / Paetow / Schumacher (2013): Gesundheitsökonomie: Strukturen - Methoden - Praxisbeispiele, 7th revised and extended edition, Stuttgart: Kohlhammer. • Lüngen / Büscher (2015): Gesundheitsökonomie, in: Kurscheid/Oswald / Zapp (ed.): Health Care- und Krankenhausmanagement, Stuttgart: Kohlhammer. • Oberender / Hebborn / Zerth (2016): Wachstumsmarkt Gesundheit, 4th revised and updated edition, Stuttgart: UTB. • Oberender / Ecker / Zerth (2010): Grundelemente der Gesundheitsökonomie, 3rd edition, Bayreuth: PCO. • Reiners (2011): Mythen der Gesundheitspolitik. 2nd completely revised edition, Bern: Huber. • Rosenbrock / Gerlinger (2014): Gesundheitspolitik. Eine systematische Einführung. 3rd completely revised edition, Bern: Huber. • Simon (2017): Das Gesundheitssystem in Deutschland: Eine Einführung in Struktur und Funktionsweise. 6th completely updated and revised edition, Bern: Huber

<table>
<tr><td>Module: GuDi 10</td><td colspan="2">Title: Qualitative Methods of Health and Social Research</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Research Methods in the Context of Health (focus: qualitative methods)</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: The successful completion of Module GuDi 01 is recommended.</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to illustrate the interpretive paradigm as a research-leading hypothesis of qualitative social research,
are able to name features distinguishing between qualitative and quantitative methods and contrast which data acquisition and evaluation methods correspond to specific research design,
are able to name concrete examples of qualitative data collection and evaluation methods used in diversity-sensitive and health-promoting projects,
are able to explain the structure and significant elements of qualitative scientific work.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
possess a comprehensive knowledge of classical and experimental methods of qualitative social research and are able to competently apply at least one method,
are able to collect qualitative data independently in interviews, participant observation, collaborative approaches and field protocols and derive collective structures or social action patterns from qualitative methods,
are capable of developing a qualitative research question, developing an adequate research design from it, documenting and interpreting the results in a methodically comprehensible way,
are competent in applying the rules pertaining to scientific work procedure.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to present, explain and argumentatively justify their questions, procedures and research results to experts and laypersons,
are able to develop a substantiated opinion of their own on a research topic, argumentatively present and defend it,
are capable of critically reflecting research results,
are able to assess the ethical relevance of research data and draw conclusions for their own research activities from it.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to independently recognise research requirements in real life and derive research questions from them
are able to independently select from the methods they have learned the appropriate materials and methods needed to solve the research question,
are capable of independently applying the respective research methods and draft a scientific paper.
are capable of classifying research questions of the social and health sciences as well as their own results independently in the scientific context.</td></tr>
</table>

Subjects of the module:	• Becoming familiar with concrete examples of qualitative and diversity-sensitive health research • Development of a qualitative question • Traditions and research-theoretical requirements on qualitative research designs • Collection of qualitative data (e.g. by means of participant observation, interviews, collaborative approaches) • Evaluation and interpretation of qualitative data (e.g. by means of qualitative content analysis, documentary method), • Method-competent execution, presentation and critical discussion of the results, • Documentation and presentation of the results of qualitative analyses, • Mixed-method approaches of the health sciences
Course type(s) :	2 WSH lecture +2 WSH exercises
Teaching methods:	Group work, group discussions, practical exercises
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a term paper in the scope of which the students are to demonstrate that they are independently able to collect qualitative data. In addition, they fulfil in their homework the qualitative requirements on developing a research question, deriving an adequate design, conducting a study inclusive of data analysis, data interpretation and data documentation. Beyond this, the students demonstrate that they are trained to apply the standards of scientific work including citation and source work. Length: 12-15 pages Time for preparation: 6 weeks
Applicability of the module	• Belongs to the competence thread "Method Competence" • Builds on the subjects of GuDi 01.
(Basic) literature:	• Bohnsack, R., Marotzki, W., & Meuser, M. (ed.) (2006, 2nd edition). Hauptbegriffe Qualitativer Sozialforschung, Opladen & Farmington Hills, Verlag Barbara Budrich. • Flick, U. (2011): Qualitative Sozialforschung. Eine Einführung, Reinbek, Rowohlt. • Przyborski, A., & Wohlrab-Sahr, M. (2009, 2nd edition): Qualitative Sozialforschung. Ein Arbeitsbuch, München, Oldenburg Verlag

<table>
<tr><td>Module: GuDi 11</td><td colspan="2">Title: Data Protection and Data Security</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Law in the Context of Health</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none.</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to name the basics and principles of data protection as a personal right of people concerned,
enumerate the dimensions of data security,
understand the fundamental concepts and technologies of data security for analogue and digitally stored data and are able to receive them,
recall the legal foundations of data protection and data security,
know and describe the role and purpose of data protection officers.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
articulate the rights of persons affected and are able to represent them,
are able to negotiate approaches to data collections and analyses in conformity with data protection,
are able to create and assess data protection concepts for projects in which health-related data are processed,
are able to develop and implement data protection measures.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
have internalised the sensitivity of health data with regard to data protection and data security,
possess the ability to work in a team in order to elaborate data-protection-relevant issues for a given project in a group,
are capable of adequately communicating the implications of relevance to data protection to all stakeholders involved in a (research) question,
are able to negotiate data protection concepts with the data protection officer.</td></tr>
<tr><td></td><td colspan="2">Independence: The students
represent the interests of people concerned like "an attorney of people affected" when it comes to questions of data protection in projects and/or the development of applications involving health data,
assume the responsibilities of the data protection officer in projects /the development of applications concerning the legal conformity of implementation of data protection regulations (and/or the preparation thereof for discussion with the officers),
are able keep themselves informed about further developments of data protection and data security regulations.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">The basics of data protection
Special features of data protection in the healthcare system
Legal foundations
The rights of people affected
The role and the responsibilities of the data protection officer
Data security measures
Measures to reach data security
The role and the responsibilities of the information security officer
Selected special issues pertaining to data protection</td></tr>
<tr><td>Course type(s) :</td><td colspan="2">2 WSH lecture +2 WSH exercises</td></tr>
</table>

Teaching methods:	Front-of-class teaching, seminar group work with presentations, exercises
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a written examination in which the students are to recall and remember the elementary aspects of data protection and data security regulations. In addition, they should be able to apply these regulations to problems occurring in real life. With regard to these issues, they should be capable of designing data protection and data security concepts. Duration: 90 minutes
Applicability of the module	• Belongs to the competence thread "Data and Digitalisation Competence"
(Basic) literature:	• Jäschke, T. (2016). Datenschutz im Gesundheitswesen. Grundlagen, Konzepte, Umsetzung. Medizinisch Wissenschaftliche Verlagsgesellschaft. • Weichert, T. (2014). Big Data, Gesundheit und der Datenschutz. In: Datenschutz und Datensicherheit 38(12), 831-838. • Koch, M., Marx, & S., Elmer, A (2013). Informationelle Selbstbestimmung und Patientensouveränität in einem vernetzten Gesundheitswesen. In: Datenschutz und Datensicherheit 37(3), 131-136.

<table>
<tr><td>Module: GuDi 12</td><td colspan="2">Title: Ethics of Data and Health</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Law in the Context of Health</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: The successful completion of GuDi 02, GuDi 04 and GuDi 07 is recommended.</td></tr>
<tr><td rowspan="4">Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to explain the ethical aspects in the context of individual health and/or the healthcare system,
are able to describe the vulnerability of patients and users,
are able to demonstrate the ethical relevance of dealing with and/or the development of algorithms, artificial intelligence and digital innovations in the context of health,
are able to name the bodies, counselling instances and commissions involved in healthcare provisions and data processing.</td></tr>
<tr><td colspan="2">Skills: The students
are able to estimate the ethical impact of digital innovations, algorithms and artificial intelligence in healthcare provision,
are able to classify the methods of data collection and processing in the healthcare system in an ethical context,
are capable of reflecting the datasets already existing in the healthcare system with regard to their ethical relevance,
are able to develop future scenarios for data production and data storage in the healthcare system and estimate their ethical dimension (think tank).</td></tr>
<tr><td colspan="2">Social competence: The students
are able to enter group discussions on the ethical dimensions of (socio)technological innovations and datasets in a professionally well-founded and critically reflective manner,
are capable of exchanging views with decision-makers, e.g., of software companies, health and nursing care insurance companies, on the ethical dimensions and impacts of their actions in a professionally well-founded and critically reflective manner.</td></tr>
<tr><td colspan="2">Self-reliance: The students
are able to discuss the ethical aspects of health data in an argumentatively well-founded manner and integrate them in decision-making processes particpatively,
are able to explain the ethical dimension of health data utilisation to all diversity groups in a comprehensible manner according to the specific target group.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Ethics in the context of data and health
Exchange with IT and health experts
Data Ethics Commission
German Ethics Council
Ethic commissions at universities and hospitals</td></tr>
<tr><td>Course type(s):</td><td colspan="2">4 WSH seminar</td></tr>
<tr><td>Teaching methods:</td><td colspan="2">Seminar group work, presentations, work in small groups</td></tr>
</table>

Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of an oral examination in which the students are to demonstrate that they have understood the ethical relevance of data production and storage in the context of health. Duration: 20 minutes
Applicability of the module	• Belongs to the competence thread "Data and Digitalisation Competence" • Builds on the Modules GuDi 02, GuDi 04, GuDi 07
(Basic) literature:	• Kolany-Raiser, B., Heil, R., Orwat, C, & Hoeren, T. (2018). Big Data und Gesellschaft: Eine multidisziplinäre Annäherung. Springer Verlag. Heidelberg. • Deutscher Ethikrat (2017). Big Data und Gesundheit - Datensouveränität als informationelle Freiheitsgestaltung. • Deutscher Ethikrat (2013). Personalisierte Medizin – der Patient als Nutznießer oder Opfer? • Schnell, M. W. (2008). Ethik als Schutzbereich. Lehrbuch für Pflege, Medizin, Philosophie. Hans Huber Verlag. Bern. • Schnell, M. W. (2006). Forschungsethik. Hans Huber Verlag. Bern.

<table>
<tr><td>Module: GuDi 13</td><td colspan="2">Title: Theories and Concepts of Diversity</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Disability and Inclusion</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td rowspan="4">Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to name social developments with respect to multiple diverse life-worlds,
are able to outline terms, basics and developments as well as resulting approaches and concepts of diversity as a resource-oriented approach,
are able to describe the development of difference criteria and social construction of inequality relations with reference to features of diversity,
comprehend the connection between health and social inequality with an outlook on the various diversity dimensions such as migration, gender, age, disability, low income, homelessness, caregiving relatives, single parents,
recognise discriminating structures in everyday life and are able to derive the construction processes associated with values and norms and their significance.</td></tr>
<tr><td colspan="2">Skills: The students
are able to reflect themselves and thereby use their own biography as a reflective "instrument". On this basis, they analyse other biographies and make reflection aspects available,
are capable of drawing references to diversity theories and deriving from them usable knowledge on how to deal with matters professionally,
assess diversity theories against their professional background and develop them further relative to context,
are able to analyse and critically reflect socially dependent health inequalities of individual diversity groups and classify the resources and potentials of these groups,
are able to carry out interventions of individual, cultural and institutional antidiscrimination in an occupational context.</td></tr>
<tr><td colspan="2">Social competence: The students
are able to communicate with various target groups in the context of health and diversity in a target-group-specific and diversity-sensitive form,
are able to weigh against the background of the expert knowledge the differences standing in connection with the diversity of people and social groups in a resource- and potential oriented form and commit themselves to the issue of diversity in the scope of expert and public discussions,</td></tr>
<tr><td colspan="2">are able to present and proficiently substantiate the concrete socially dependent health disadvantages and needs of various target groups in the context of health and diversity to decision-makers and experts and explain the desiderata to be derived therefrom and defend them with scientifically supported arguments.</td></tr>
</table>

	Self-reliance: The students • understand diversity as a societal phenomenon, taking into consideration the disparity and plurality in more or less homogeneously oriented societal subdomains and are able to formulate this, • compile independently various diversity theories, develop them further and derive from them a comprehensive description of the thematic field of diversity, • are independently able to derive the situation of individual diversity groups with regard to lacking participation in a resource-oriented manner and develop pertinent participatory concepts.
Subjects of the module:	• Definitions, theories and understanding of "diversity" and delimitations of related approaches • Diversity as a societal phenomenon • Legal foundations and political influences (e.g. EU Antidiscrimination Directive, German Federal Equal Treatment Act (AGG), equality and integration policy, UN Disability Rights Convention) • Social inequality and diversity • Theory and history of discrimination forms (e.g. racism, age discrimination) • Introduction into diversity and intersectionality research
Course type(s):	4 WSH seminar
Teaching methods:	Seminar group work, front-of-class teaching, presentations, excursions, problem-oriented learning
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a term paper in which the students are to demonstrate that they are able to apply the various theories and concepts of diversity to real-life issues and describe new research- and application-oriented tasks, define corresponding objectives and as well as concrete approaches to solutions while reflecting their potential consequences. Length: 12-15 pages Time for preparation: 6 weeks
Applicability of the module	• Belongs to the competence thread "Application-Related Health Knowledge
(Basic) literature:	• Van Keuk, E., Ghaderi, C, Joksimovic, L., & David, D. (ed.) (2011). Diversity Transkulturelle Kompetenz in klinischen und sozialen Arbeitsfeldern. Stuttgart: Kohlhammer. • Vanderheiden, E., & Mayer, C.-H. (ed.). (2014). Handbuch Interkulturelle Öffnung: Grundlagen, Best Practice, Tools. Vandenhoeck & Ruprecht. • Knipper, M., & Yasar, B. (2009). Migration und Gesundheit. Nürnberg: BAMF. • Falge, C. (2018). Dynamics of informal exclusion. Migrants' Health as experienced in the City Lab Bochum. In K. Kuehlmeyer & C. Klingler & R. Huxtable (eds.), Ethical, Legal and Social Aspects of Healthcare for Migrants: Perspectives from the UK and Germany. Oxford: Taylor & Francis Routledge. • Beck, I. & Greving, H. (ed.) (2012). Lebenslage und Lebensbewältigung. Stuttgart: Kohlhammer. • Bernasconi, T., & Böing, U. (2016). Schwere Behinderung & Inklusion. Facetten einer nicht ausgrenzenden Pädagogik. Oberhausen: Athena. • Haveman, M., & Stöppler, R. (2014). Gesundheit und Krankheit bei Menschen mit geistiger Behinderung. Handbuch für eine inklusive medizinisch-pädagogische Begleitung. Stuttgart: Kohlhammer. • Schnoor, H. (ed.) (2007). Leben mit Behinderungen. Eine Einführung in die Rehabilitationspädagogik anhand von Fallbeispielen. Stuttgart: Kohlhammer.

	• Kuhlmey, A.,Schaeffer, D. (ed.) (2008). Alter, Gesundheit und Krankheit. Huber Verlag. Bern. • Backes, G. M., Clemens, W. (2013). Lebensphase Alter: Eine Einführung in die sozialwissenschaftliche Alternsforschung. 4th edition. Beltz Juventa. Weinheim.

<table>
<tr><td>Module: GuDi 14</td><td colspan="2">Title: Health Communication and Moderation</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Communication with diverse Groups</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: The successful completion of GuDi 04 is recommended.</td></tr>
<tr><td rowspan="4">Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to reproduce the theoretical foundations of health communication and moderation and outline the requirements on a target-group-adequate conceptualisation and implementation,
are able to express the challenges of inter- and transdisciplinary health communication and moderation in their significance to the mediation of health data,
are able to articulate the methodical approaches of health communication and moderation with reference to their study area,
are able to name the limitations and risks in the scope of health communication and moderation for the mediation of health data.</td></tr>
<tr><td colspan="2">Skills: The students
are able to recognise and assess target-group-specific, health-data-related information and communication requirements among both experts and laypersons,
are capable of formulating diversity-sensitive, health-related communication content relating to the specific requirements of their target groups,
are able to implement moderation techniques and methods competently and with target-group specificity,
are able to recognise and assess the challenges and limitations of health communication and moderation with regard to the mediation of data-supported information, and develop approaches to their management.</td></tr>
<tr><td colspan="2">Social competence: The students
possess a professionally well-founded, constructively critical position of their own in handling health data, are able to articulate it and let it merge into their own communicative actions,
are able to contact relevant and suitable cooperation partners and derive health communicative requirements from? experts and laypersons,
are able to differentiate the subjects and forms of health communication as well as moderation and prepare and teach them target-group-specifically,
are able to view matters from the perspective of their cooperation partners and consider their perceptions in their own health communication.</td></tr>
<tr><td colspan="2">Self-reliance: The students
are able to assess their own development requirements related to communication and moderation competences and react by applying adequate strategies,
recognise technology-induced alterations in the area of health communication and moderation and draw on them autonomously, actively and in a target-group-specific form in order to design their own communication and moderation approaches,</td></tr>
</table>

	• can recognise and assess new demand areas for health communication and moderation in the field of health data and are able to develop intervention concepts oriented to health-data for them, • have developed their own value system as concerns health communication when dealing with health data and are able to articulate and independently further develop it.
Subjects of the module:	• The basics of health communication • Requirements and problems of designing and communicating health information • Target-group-specific as well as transdisciplinary and interdisciplinary health communication with regard to health data and their communication • Theoretical foundations of moderation • Moderation techniques and concepts in the context of health data • Practical application
Course type(s):	2 WSH seminar + 2 WSH exercises
Teaching methods:	Seminar teaching, group work, exercises
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a practical examination. The students are to demonstrate competences of health communication which are reflected and professionally defended in a subsequent examination talk. This way the students have the opportunity to demonstrate that they are not only aware of the complex requirements of health communication, but are also able to employ their competences in a social situation by means of concrete actions. Duration: 30 minutes In addition, the independent presentation of a moderation unit has to be delivered as an ungraded study achievement.
Applicability of the module	• Belongs to the competence thread "Social and Self-Competence" • Builds on the subjects of GuDi 04
(Basic) literature:	• Fromm, B., Baumann, E., & Lampert, C. (2011). Gesundheitskommunikation und Medien. Ein Lehrbuch. Stuttgart: Kohlhammer. • Seifert, J. W. (2010). Visualisieren, Präsentieren, Moderieren. 28th edition, Offenbach: GABAL. • Schultz von Thun, F. (1981): Miteinander reden: 1. Störungen und Klärungen. Reinbeck b. Hamburg: Rowohlt.

<table>
<tr><td>Module: GuDi 15</td><td colspan="2">Title: Methods of Social Environment–Related Data Analysis</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Place and Health</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: The successful completion of GuDi 01 is recommended.</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
remember central interactions between place and health,
display health-related issues cartographically,
illustrate various forms of geo-data,
are able to describe the requirements on the completeness, consistency, and accuracy of geo-data,
are able to name geo-information technologies and geo-data infrastructures.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
process data on various spatial levels,
interpret health-related data in a spatial context,
communicate their analyses cartographically,
work with geographic information systems (GIS),
perform health-related analyses with geographic information systems,
perform spatial analyses,
perform spatially related surveys.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
estimate the knowledge of various maps users,
accept feedback on their cartographical drafts and are able to consider the draft versions of others constructively.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
transfer data into spatial databases,
infer from their analyses information on spatial determinants and health connections</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Application of geographic information systems (GIS)
(Health-related) spatial databases
Fundamentals of cartography
Spatial survey methods</td></tr>
<tr><td>Course type(s):</td><td colspan="2">2 WSH lecture + 2 WSH exercises</td></tr>
<tr><td>Teaching methods:</td><td colspan="2">Seminar group work, front-of-class teaching</td></tr>
<tr><td>Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):</td><td colspan="2">The module examination consists of a term paper in the scope of which the students demonstrate that they are able to independently collect, analyse, cartographically display, document and interpret spatial data with the aid of geographical information systems. In addition, the students prove that they are trained to apply the standards of scientific procedure including customary citation and source work.
Length: 12-15 pages
Time for preparation: 6 weeks</td></tr>
<tr><td>Applicability of the module</td><td colspan="2">Belongs to the competence thread "Method Competence"</td></tr>
</table>

(Basic) literature:	• Augustin, J., Kistemann, T., Koller, D., Lentz, S., Maier, W., Moser, J., & Schweikart, J. (2017). Gute Kartographische Praxis im Gesundheitswesen (GKPiG), Forum IfL, Vol. 32: 1-36. • Bill, R. (2016). Grundlagen der Geo-Informationssysteme. Wichmann. • Graser (2016). Learning QGIS 2.4: Packt Publishing. • Schweikart, J., Kistemann, T. (2004). Geoinformationssysteme im Gesundheitsweisen. Grundlagen und Anwendungen. Wichmann

<table>
<tr><td>Module: GuDi 16</td><td colspan="2">Title: Digital Health</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Technologies</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td rowspan="4">Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
name the chances and challenges of digitalisation in the healthcare system,
describe application areas of digital services in healthcare,
understand the potentials of change in the healthcare system resulting from digital services and are able to communicate them,
name essential IT systems in the healthcare system, the telematics infrastructure as well as central digital services.</td></tr>
<tr><td colspan="2">Skills: The students
are able to recognise and formulate the chances but also the challenges of digital services for concrete application purposes,
are able to co-design in team structures the processes in which digital services are applied,
are able to assess digital services according to quality criteria for a given application purpose.</td></tr>
<tr><td colspan="2">Social competence: The students
are able to represent the chances and risks of digital technologies with an orientation to target-groups,
are capable of moderating reconstruction processes for a reasonable use of digital technologies,
are able to elevate the digital health competence of various users groups.</td></tr>
<tr><td colspan="2">Self-reliance: The students
are able to independently introduce digital options into healthcare provision processes,
independently recognise the information requirements of people involved and can make contributions to satisfy these requirements,
inform themselves independently about technological advancements in order to keep up on the further development of digital solutions.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Fundamentals of digitalisation in the healthcare system
eHealth/mhealth/telemedicine
Electronic file systems
Primary systems and interlinked systems in the healthcare system
Basics of the infrastructure of telematics
Ambient assisted living
Digital services for prevention, diagnosis, therapy and nursing care
Quality criteria applicable to digital services
Medical devices and German Medical Products law (MPG)
Legal and financial framework conditions</td></tr>
<tr><td>Course type(s):</td><td colspan="2">1 WSH lecture + 3 WSH seminar</td></tr>
<tr><td>Teaching methods:</td><td colspan="2">Lecture, seminar group work</td></tr>
</table>

Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a written examination in which the students recall and discuss various potentials and challenges of digitally supported healthcare provision structures. In addition, they are supposed to be able to outline concepts for digitally supported solutions to concrete healthcare problems while reflecting their potential effects. Doing this, they are also to be capable of assuming a user-oriented perspective and take the societal, legal and financial framework conditions into consideration. Duration: 90 minutes
Applicability of the module	• Belongs to the competence thread "Data and Digitalisation Competence"
(Basic) literature:	• Haas, P. (2006). Gesundheitstelematik, Springer, Heidelberg. • Fischer, F., & Krämer, A. (2016). eHealth in Deutschland (ed.). Springer Vieweg, Berlin. • Pfannstiel, M., Da-Cruz, P., & Mehlich, H. (2016). Digitale Transformation von Dienstleistungen im Gesundheitswesen I: Impluse für die Versorgung, Springer Gabler. • Andelfinger, V. P., & Hänisch, T. (2016). eHealth. Wie Smartphones, Apps und Wearables die Gesundheitsversorgung verändern werden, Springer Gabler. • Trill, R. (2009). Praxisbuch eHealth. Von der Idee zur Umsetzung, Kohlhammer.

<table>
<tr><td>Module: GuDi 17</td><td colspan="2">Title: Practical Study Phase</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Didactics</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 12 CP</td><td rowspan="3">Total work effort: 360 hours</td><td>of which is contact time: 30 hours</td></tr>
<tr><td>of which is self-study time: 30 hours</td></tr>
<tr><td>of which is practice: 300 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: Achievement of at least 60 ECTS credit points (12 of which must be awarded from GuDi 02 and GuDi 07). The successful completion of GuDi 11 is recommended.</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to describe various fields of action pertaining to health data and digitalisation,
are able to outline their future occupational profile in the fields of action pertaining to health data and digitalisation and describe the diversity of the occupational profile with regard to its possibilities and requirements of further development,
are able to explain the significance of health data for the provision of healthcare,
are able to name their concrete own and institutional approaches to improve the provision of healthcare against the background of their professional knowledge.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are able to concretise and systematically further develop their professional identity and attitude by their consistent theoretical and practical occupation with the practical field they selected,
are able to design their activity in the chosen practical field on the basis of a differentiated action field analysis and their professional knowledge,
are able to apply their theoretical knowledge to their practical field and thus infer needs for research as well as suitable concepts to work on them,
realistically assess the practical action fields of health data and digitalisation with regard to the quality of healthcare provisions and are capable of developing a future-oriented expert perspective from it.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to explain the need for graduates of the study, engage in arguments with third parties and demonstrate the role of graduates for new structures needed in the healthcare system,
use their practical experiences and contacts for the presentation of an occupational profile to the expert public and a broad presence of the issue in the population,
come to an agreement with the adjoining occupational groups on one's own role as an expert of health data and digitalisation in the various fields of action and derive the consequences for presentation of the occupational profile.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
describe their role in the action fields of heath and digitalisation in a disciplinary and interdisciplinary dialogue with the members of other professional groups,
are able to formulate the needs to provide their services in professional and political contexts,</td></tr>
</table>

	• promote the further development of the action field of health data and digitalisation by a differentiated and systematic reflection of their knowledge derived from practice.
Subjects of the module:	• Acquisition of practical skills in the field of health data and digitalisation in an institution of the healthcare system • Description and evaluation of action fields in the context of heal data and digitalisation (action field analysis) • Conceptualisation, implementation and evaluation of tasks resulting from the chosen work field • Reflection of practical experience as well as one's own role in action fields of health data and digitalisation
Course type(s):	2 WSH exercise + 300 hours of practice in an institution Equivalent to 10 weeks with a 6 hour workday
Teaching methods:	Take over assignments in a practice facility, group work, presentations, exchange of experiences, peer counselling
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	1. Completion of the practical study phase covering 300 hours 2. The module examination consists of an oral examination. In it, the students present and defend knowledge and experiences they have acquired and the tasks they have worked on in the scope of the practical study phase. Both presentation and critical discussion include subjects of experiences and results, the ratio of theory and practice, scientific issues and the reflection of one's own occupational biography Duration: 20 minutes
Applicability of the module	• Belongs to the competence thread "Practice and Project Competence" • Particularly the subjects of GuDi 02 and GuDi 07 are applied in practice
(Basic) literature:	• Moebus, S., Kuhn, J., & Hoffmann, W. (2017). Big Data und Public Health. Ergebnisse der AG 1 des Zukunftsforums Public Health, Berlin. Gesundheitswesen, 79(11), 901-905. • Schachinger, A. (2014). Der digitale Patient: Analyse eines neuen Phänomens der partizipativen Vernetzung und Kollaboration von Patienten im Internet. Schriften zur Medienwirtschaft und Medienmanagement, Vol. 34. Baden-Baden: Nomos. • Stiftung Datenschutz (2017). Big Data und E-Health. Big Data im Gesundheitswesen: Chancen nutzen, Patientenrechte wahren. Berlin: Erich Schmidt Verlag.

<table>
<tr><td>Module: GuDi 18</td><td colspan="2">Title: Interprofessional Cooperation</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Gerontology</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 300 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to name the individual health professions as well as their specific fields of activity and their interdependencies within the healthcare system,
are able to name various professions in administration, engineering and IT in the context of health data as well as their specific fields of activity and their interdependencies within the healthcare system,
are able to describe their own future profession in terms of a pivotal function at the interface between the various stakeholders in the healthcare system,
are able to explain the high relevance of interprofessional cooperation needed to achieve a high quality of healthcare provisions.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are able to take a (disciplinary) perspective of their own,
are able to take the perspective of other professions,
are capable of developing questions and approaches to solutions from the perspective of the various professions,
reflect inhibitory and supportive conditions and impact factors for interprofessionality in the healthcare system.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to categorise and comprehend the requirements and thinking patterns of the various professions,
are able to balance the various requirements and thinking patterns of the various professions by way of mediation,
are able to communicate the methods and concepts of their own discipline objectively and comprehensibly to various other health professions.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to develop their own cooperation models independently and communicate them to the other professions,
are able to review developed cooperation models and create them sustainably.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Occupational profiles of health professions and other relevant professions,
Activity focus of health professions
Comparison of professional self-images
Conditions of successful cooperation
Obstacles of interprofessional work</td></tr>
<tr><td>Course type(s):</td><td colspan="2">2 WSH lecture +2 WSH seminar</td></tr>
<tr><td>Teaching methods:</td><td colspan="2">Seminar group work, front-of-class teaching, presentations, group discussions also including experts, working in small groups</td></tr>
</table>

Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of an oral examination. In the examination the students are to show that they have acquired an understanding of the individual professions belonging to the healthcare system and other relevant professions and are able to take the perspective of each of them. Duration: 20 minutes
Applicability of the module	• Belongs to the competence thread "Social and Self-Competence "
(Basic) literature:	• Schuss, U., & Blank, R. (2018). Qualitätsorientierte interprofessionelle Kooperation (QuiK): Pflegefachkräfte und Mediziner im Fokus. Hogrefe. Bern. • Brandstädter, M., Grootz, S., & Ullrich, T. W. (2016). Interne Kommunikation im Krankenhaus: Gelungene Interaktion zwischen Unternehmen und Mitarbeitern. Springer Verlag. Heidelberg. • Meier, S., Lütolf, D. (2015). Herausforderung Intranet: Zwischen Informationsvermittlung, Diskussionskultur und Wissensmanagement. Springer Verlag. Heidelberg. • Höhmann, U., Müller-Munde, G., & Schulz, B. (1999). Qualität durch Kooperation- Gesundheitsdienste in der Vernetzung. Mabuse-Verlag. Frankfurt.

<table>
<tr><th>Module: GuDi 19</th><th colspan="2">Title: Project and Quality Management</th></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Economics and Politics</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 30 hours</td></tr>
<tr><td>of which is self-study time: 150 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
know the central terms, processes, methods and instruments of project and quality management,
name the requirements to design relevant processes in the field of project and quality management, to identify of improvement potential and to infer and implement concrete improvement measures,
know the central requirements on the structures of management, planning, control and improvement of quality.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are able to reflect project requirements against the background of measureable quality requirements,
are able to operationalise, display and control project and quality goals by means of measureable criteria,
are able to take informed decisions related to both the process and the quality of service provisions and/or the product in a diversity-sensitive way,
are capable of substantiating the necessity of a systematic project and quality management scientifically and identify links between the various processes.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to integrate the relevant interest groups/stakeholders including their respective perspectives in order to steer projects,
are able to communicate the requirements of project and quality management adequately to specific audiences and apply their communication competences to organisation-relevant processes,
are able to properly represent, objectively substantiate and argumentatively justify the results of quality management and evaluation processes to relevant interest groups/stakeholders and laypersons.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to apply their knowledge in the scope of processes of HR and organisation development and to make an active contribution to quality-assuring measures,
are able to derive necessary consequences for future projects and their control on the basis of evaluation results,
are able to independently develop a project idea and plan it with regard to content, time and in view of available resources and anticipate an effective and efficient realisation,
are able to independently make a risk assessment and realise projects in close consultation with other responsible and/or involved actors.</td></tr>
</table>

Subjects of the module:	**Project management** • Theories of organisation, organisation development and organisational change • Processes, methods and instruments of project management (project phases, people involved, objectives, planning, control and finalisation) • Identification and inclusion of the relevant interest groups /stakeholders • EDP and documentation **Quality Management** • Processes, methods and instruments of quality management • Quality management in the healthcare system • Models of quality management • Implementation planning and certification • Basics, methods and concepts of evaluation • Actors of QM in statutory health insurance • Quality and competition
Course type(s):	2 WSH seminar
Teaching methods:	Seminar group work, group discussions, front-of-class teaching
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a written examination in which the students are to recall and remember various quality management theories. In addition, they are supposed to be able to apply these theories to real-life questions. Duration: 60 minutes
Applicability of the module	• Belongs to the competence thread "Method Competence "
(Basic) literature:	• Ahlemann, F., & Eckl, C. (ed.) (2013). Strategisches Projektmanagement. Praxisleitfaden, Fallstudien und Trends. Springer Gabler. • Donabedian, A. (2005). Evaluating the Quality of Medical Care. In: The Milbank Quarterly 83(4), 691-729. • Ertl-Wagner, B., Steinbrucker, S., & Wagner, B. C. (2013). Qualitätsmanagement und Zertifizierung, 2nd edition, Springer. • Grimm, R. (2009). Einfach Komplex. Neue Herausforderungen im Projektmanagement. VS Verlag für Sozialwissenschaften. • Heintel, P., Krainz, E. (2015). Projektmanagement. Hierarchiekrise, Systemabwehr, Komplexitätsbewältigung. Springer. • Hensen (2016). Qualitätsmanagement im Gesundheitswesen, Grundlagen für Studium und Praxis, Springer.

<table>
<tr><th>Module: GuDi 20 a/GuDi 21a</th><th colspan="2">Title: Health Data and Diversity</th></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Age Sciences</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Elective compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 7 CP</td><td rowspan="3">Total work effort: 210 hours</td><td>of which is contact time: 75 hours</td></tr>
<tr><td>of which is self-study time: 135 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: The successful completion of the Module GuDi 13 is recommended.</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to name existing data sources with regard to the (non)consideration of various diversity aspects such as migration, disability, age, poverty, gender and sexual orientation,
are able to describe the significance of diversity-specific data for health-related inequality,
are capable of stating the significance of data with regard to optimisation of the access of vulnerable groups to the healthcare system,
illustrate the significance of data and their collection as the foundation of developing population- and/or target-group-specific interventions,
outline the connection between data and community empowerment in the context of diversity.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
analyse and evaluate data with regard to the (non)consideration of various diversity aspects,
compare data and examine the respective significance of (non)diversity-specific data for health inequality,
illustrate the value data have for the reduction of inequality and to what extent insufficient data interpretations lead to health inequalities,
select which data can be collected and used to carry out population- and/or target-group-specific interventions and as an empowerment instrument.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
work together in groups on existing data and reflect the target-group specificity of the results,
are able to evaluate the relevance and quality of data involving vulnerable groups,
are able to justify their results argumentatively and develop them further.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to analyse their data by themselves with regard to diversity features,
are able to develop diversity-sensitive questions and answer them based on an appropriate data basis,
are able to select collection instruments or create instruments adjusted to target groups,
are able to define and afterwards reflect their work assignment.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Data in the context of diversity
Diversity-relevant data sources
Analysis of existing datasets for registered diversity features
Processing of selected databased questions in the context of health and diversity
Inequality of health</td></tr>
</table>

Course type(s):	2 WSH seminar +3 WSH exercise
Teaching methods:	Seminar group work, presentations, working in small groups
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of an oral examination in which the students report of the significance of diversity in datasets. The examination is to demonstrate analytical skills, critical reflection and reasoning power. Duration: 30 minutes
Applicability of the module	• Deepens subjects of Module GuDi 13
(Basic) literature:	• Hansen, K. (2017). CSR und Diversity Management: Erfolgreiche Vielfalt in Organisationen. Springer Verlag, Heidelberg. • Kinne, P. (2016). Diversity 4.0: Zukunftsfähig durch intelligent genutzte Vielfalt. Springer Verlag, Heidelberg. • Bendl, R., Hanappi-Egger, E., & Hofmann, R. (ed.) (2012). Diversität und Diversitätsmanagement. Facultas, Vienna.

<table>
<tr><td>Module: GuDi 20 b/GuDi 21b</td><td colspan="2">Title: Health Data and Users</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Psychology across the Lifespan</td></tr>
<tr><td>Qualification level: bachelor</td><td>Semester: winter semester</td><td>Module type:
elective-compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 7 CP</td><td rowspan="3">Total work effort: 210 hours</td><td>of which is contact time: 75 hours</td></tr>
<tr><td>of which is self-study time: 135 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: The successful completion of modules GuDi 05 and GuDi 06 is recommended.</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are aware of the subjects and definition of health psychology and relevant basic terms of the discipline and the significance of health psychology in the range of other health-related disciplines,
possess well-founded knowledge of resource-oriented concepts and models in connection with digitalisation,
know the definitions and measurement methods relating to health-related quality of life,
possess well-founded knowledge of the relevant theories and models of health behaviour,
possess basic knowledge of theory-based strategies and interventions in health psychology,
possess a broad knowledge of type and significance of personality features in relation to health, health behaviour and digitalisation.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are able to consider acquired knowledge of life-phase-specific resources, needs and requirements in connection with digitalisation user-specifically and formulate constructive optimisation proposals,
are capable of reading, understanding and interpreting scientific studies on health-psychological questions,
are able to transfer and apply the findings of health psychology to the challenges associated with the thematic fields of health and digitalisation,
are able to adjust their actions in the work field of health and digitalisation to individual or group-specific requirements, needs and resources.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to reflect the significance of individual or group-specific factors to health, disease and digitalisation and explain and defend their knowledge to experts and decision-makers,
are able to coordinate with other persons involved and develop constructive approaches to solutions to the benefit of health and digitalisation,
are able to reflect and communicate their own personal resources and development tasks,
are able to adjust their conversational behaviour to the needs of users, conversation partners or patients.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to comprehend various professional standpoints in the context of health and digitalisation and consider them scientifically justified under health-psychological perspectives,
are able to substantiate their actions in the work field of health and digitalisation on the basis of health psychology,</td></tr>
</table>

	• are able to acquire, further develop and apply the health-psychological knowledge which is related to individual and group-specific needs, risks and resources and necessary for their actions, • are able to define their own professional limitations and refer people affected to the competent offices, • are able to further educate themselves independently as concerns mental health in the context of digitalisation.
Subjects of the module:	• Resource-oriented models and the significance of social resources in connection with digitalisation, • Health-related quality of life and digitalisation • Theories and models of health behaviour • Personality features and Big Data • Theory-based strategies and interventions including discipline-related foundations of evaluation • Risks of using social media and digitalisation as well as their effects on mental health • Artificial intelligence, mental health, behaviour and the effects on living and working together
Course type(s):	2 WSH seminar + 3 WSH exercises
Teaching methods:	Discussion, group work, presentations, case examples
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of an oral examination in which the students are to recall and remember (unaided) various theories and findings of health psychology. In addition, they are to be able to apply these theories to real-life questions and describe new research- and application-oriented tasks, define corresponding objectives and concrete approaches to solutions while reflecting their potential consequences. Duration: 30 minutes
Applicability of the module	• Builds on subjects of modules GuDi 05 and GuDi 06
(Basic) literature:	• Cernavin, O., Schröter, W., & Stowasser, S. (2017). Prävention 4.0. Analysen und Handlungsempfehlungen für eine produktive und gesunde Arbeit 4.0. Berlin: Springer. • Renner, B., & Salewski, C. (2019). Gesundheitspsychologie. Wiesbaden: Springer VS. • Schwarzer, R. (2005). Gesundheitspsychologie. Enzyklopädie der Psychologie, Vol. 1. Göttingen: Hogrefe. • Spitzer, M. (2018). Die Smartphone-Epidemie: Gefahren für Gesundheit, Bildung und Gesellschaft. Stuttgart: Klett-Cotta. • Stetina B., Kryspin-Exner, I. (2009). Gesundheit und Neue Medien. Psychologische Aspekte der Interaktion mit Informations- und Kommunikationstechnologien. Vienna: Springer.

<table>
<tr><th>Module: GuDi 20 c/GuDi 21 c</th><th colspan="2">Title: Health Data and Healthcare System</th></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Economics and Politics</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Elective compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 7 CP</td><td rowspan="3">Total work effort: 210 hours</td><td>of which is contact time: 75 hours</td></tr>
<tr><td>of which is self-study time: 135 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: The successful completion of Module GuDi 09 is recommended.</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to name existing data bases possessing system perspective relevance, their origin and accessible references and/or sources of data in the healthcare system,
are capable of identifying the various actors of the healthcare system who own large and/or central data which are of relevance to healthcare provisions in Germany,
are able to outline the connection between health data and decision-making processes,
recognise the potentials of health data to improve the care structures on system level and are able to state the possibilities and limitations of health data,
illustrate the significance of data as the foundation of developing expedient health-political reform projects.</td></tr>
<tr><td></td><td colspan="2">Skills: The students are able to
acquire, assess and interpret databased, health-related reporting of various actors of the healthcare system,
assess existing datasets from a system perspective for quality and completeness and, if needed, recognise missing data and outline alternative acquisition options,
assess datasets derived from various sources of the healthcare system for congruency and combine them,
recognise the potentials of health data and derive improvement proposals from them to optimise the care structures on the system level.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to build system-relevant information for various stakeholders from datasets and process them target-group-specifically,
are able to critically reflect data-supported reports with regard to the goal-oriented interests of the publishing actors, examine their objective and neutral processing and reveal inconsistencies,
are able to assess datasets of the healthcare system for the potentials and benefit for care structures and identify their significance for the people affected in the healthcare system.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to independently procure datasets of the healthcare system from the accessible sources, process and derive results from them,
are able to recognise the needs for health data in the healthcare system and gather health data on their own,
are capable of processing system-relevant questions independently on the basis of existing health data and develop their own approaches toward solutions.</td></tr>
</table>

Subjects of the module:	• Actors of the healthcare system and their health data: in particular association of SHI physicians, hospitals, health insurance companies, • Databases and registers in the healthcare system • Segregated health data and power • Evidence and health data • Significance of health data for changes in the care structures and processes • Electronic data exchange in the healthcare sector • Digitalisation of the care structures
Course type(s):	2 WSH seminar + 2 WSH exercises
Teaching methods:	Seminar group work, front-of-class teaching, presentations
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of an oral examination in which the students are to lead an expert discussion on various subjects from the context of health data and the healthcare system and in which it is not primarily about examining specialised knowledge but applying available knowledge to current health-political topics in a context with health data. The students are to demonstrate that they are able to independently apply and critically reflect the knowledge they possess to a concrete subject related to the structures of the healthcare system. Duration: 30 minutes
Applicability of the module	• Subjects of Module GuDi 09 are deepened and placed in a context of health data
(Basic) literature:	• Kuhn, J., & Wildner, M. (2006): Gesundheitsdaten verstehen. Bern: Huber. • Pfaff, H. et al. (2017): Lehrbuch Versorgungsforschung. Systematik - Methodik - Anwendung. 2nd completely revised edition, Stuttgart: Schattauer. • MGEPA (2015): Landesgesundheitsbericht. Informationen zur Entwicklung von Gesundheit und Krankheit in Nordrhein-Westfalen. • Robert Koch Institut (2015): Gesundheit in Deutschland. Gesundheitsberichterstattung des Bundes. Gemeinsam getragen von RKI und Destatis. • Wierse, A., & Riedel, T. (2017): Smart Data Analytics. Mit Hilfe von Big Data Zusammenhänge erkennen und Potentiale nutzen. Berlin: de Gruyter.

<table>
<tr><th>Module: GuDi 20 d/GuDi 21 d</th><th colspan="2">Title: Health Data and Place</th></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Place and Health</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Elective compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 7 CP</td><td rowspan="3">Total work effort: 210 hours</td><td>of which is contact time: 75 hours</td></tr>
<tr><td>of which is self-study time: 135 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: The successful completion of Module GuDi 15 is recommended.</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to describe the relevance of spatial determinants of health,
are able to name the connections between place and health data,
are able to explain the representation of health questions and geo-data infrastructures.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
assess spatially related analyses for their meaning,
classify various geo-databases depending on their content, data processing and data generation,
test spatially related data analyses, particularly for their spatial design,
apply various concepts of space,
are capable of presenting the results of spatial analyses in geographical information System (GIS),
are able to process connections between health and place on the basis of health data.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to process and present sociospatial analyses target group related,
are able to discuss the results of sociospatial analyses with various stakeholders.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to develop health-related questions in a sociospatial context independently,
are able to independently draft an adequate survey design for health-related and sociospatial questions,
assess the research results scientifically.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Models for spatial determinants of heath
Concepts of space
Geo-data and digitalisation (Web-GIS, Open Data)
Citizen Science and GIS
Quantitative and qualitative spatial survey methods</td></tr>
<tr><td>Course type(s):</td><td colspan="2">2 WSH seminar + 2 WSH exercises</td></tr>
<tr><td>Teaching methods:</td><td colspan="2">Seminar and exercises</td></tr>
<tr><td>Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):</td><td colspan="2">The module examination consists of an oral examination in which the students report of the significance of sociospatial health-related connections in datasets. The examination is supposed to reveal analytical ability, critical reflection and argumentation strength.

Duration: 30 minutes</td></tr>
<tr><td>Applicability of the module</td><td colspan="2">Builds on the subjects of Module GuDi 15</td></tr>
</table>

(Basic) literature:	• Köckler, H. (2019). Sozialraum und Gesundheit. In: Haring (ed.) Gesundheitswissenschaften. Springer. • Schweikart, J., Kistemann, T. (2004). Geoinformationssysteme im Gesundheitsweisen. Grundlagen und Anwendungen. Wichmann. • Annang et al. (2016). Photovoice: Assessing the Long-Term Impact of a Disaster on a Community's Quality of Life. In: Qualitative Health Research, Vol. 26(2),241-251.

<table>
<tr><td>Module: GuDi 22</td><td colspan="2">Title: Teaching Research Project</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Research Methods in the Context of Health (focus: quantitative methods)</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: winter semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 10 CP</td><td rowspan="3">Total work effort: 300 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 240 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: The successful completion of Module GuDi 01 and GuDi 03 is conditional and, in addition, the successful completion of Module GuDi 06, GuDi 10, GuDi 15 and GuDi 17 is recommended.</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to outline the development of a research design,
are able to name the possibilities and limitations of quantitative, qualitative and mixed methods approaches,
are able to demonstrate that they possess the required knowledge to select and apply adequate qualitative and quantitative research methods of the health and social sciences as well as mixed method approaches,
are able to name the knowledge necessary for the interpretation of research data and drafting research reports.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are able to argumentatively justify the application of particular methods or a mixed method approach, based on their knowledge of the possibilities and limitations of a research design,
are able to apply quantitative, qualitative and sociospatially related analytical methods of the health and social sciences in a particular case,
are capable of reflecting and assessing their empirically gained knowledge against the background of theoretical knowledge,
are able to apply the quality criteria of qualitative and quantitative research methods and assure compliance with these criteria.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to help to shape a research process constructively in a team,
are able to present, justify and argumentatively defend their questions, procedures and research results to/against experts and laypersons,
are capable of developing a reasoned opinion of their own on a research topic, present and defend it argumentatively,
are able to critically reflect their own research results and those of others and enter into a constructive professional dialogue,
are able to judge the ethical relevance of research data and draw conclusions for their own research activities.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to independently recognise research requirements and derive research questions from them,
are able to develop and realise a research design by way of self-organisation,
are able to independently select from the methods they have learned the appropriate materials and methods needed to solve the research question,
are independently capable of applying the adequate research methods and draft a scientific paper,</td></tr>
</table>

	• are capable of classifying research questions in the context of health data and digitalisation as well as their own results independently in the scientific context.
Subjects of the module:	• Delimitation of a topic and definition of a relevant problem • Elaboration of a relevant topic • Development of a leading question • Elaboration of an adequate research design • Creation of a project plan including a schedule of central milestones and endpoints • Determination of the methodical procedures • Research project planning • Realisation of the research project, particularly including data collection, processing and analysis • Interpretation of results • Written documentation of the research project: drafting of a research report
Course type(s):	2 WSH project study + 2 WSH seminar
Teaching methods:	Seminar group work, front-of-class teaching, presentations
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a term paper in which the students are to develop a topic and a leading question on their own, independently collect and evaluate data, process and critically reflect the results and classify them in the scientific context. Length: 22-25 pages Processing time: 9 weeks
Applicability of the module	• Module in the competence thread of "Practice and Project Competence" • Bundles the acquired method competence and applies them to a concrete question • Theoretically learned method competences are practically applied
(Basic) literature:	• van der Donk, C, van Lanen, B., Wright, M. (2015): Praxisforschung im Sozial- und Gesundheitswesen, Bern: Huber. • Herschel, M. (2018): Das KliFo-Buch. Praxisbuch klinische Forschung, 3rd revised and extended edition, Stuttgart: Schattauer. • Kuhn, J., Wildner, M. (2006): Gesundheitsdaten verstehen, Bern: Huber. • Pfaff, H. et al. (2017): Lehrbuch Versorgungsforschung. Systematik - Methodik - Anwendung, 2nd completely revised edition, Stuttgart: Schattauer. • Wierse, A., & Riedel, T. (2017): Smart Data Analytics. Mit Hilfe von Big Data Zusammenhänge erkennen und Potentiale nutzen, Berlin: de Gruyter Oldenbourg

<table>
<tr><td>Module: GuDi 23</td><td colspan="2">Title: Society and Digitalisation</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Health Technologies</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 9 CP</td><td rowspan="3">Total work effort: 270 hours</td><td>of which is contact time: 90 hours</td></tr>
<tr><td>of which is self-study time: 180 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to define selected terms of society,
are capable of naming digital solution patterns for healthcare and thereby articulate particularly the role of sociotechnical systems,
deepen their critical-reflective view on the use of health data for new forms of healthcare provisions while taking macrosocial dimensions into consideration,
are able to recognise intentional and unintentional social consequences of digital applications and articulate them when designing applications.</td></tr>
<tr><td></td><td colspan="2">Skills: The students are able to
design digitalisation processes under macrosocial point of views,
conduct technology impact assessments for data-driven applications for individuals, communities and society,
analyse selected digital transformation processes of social issues and connect them with already known digital applications.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to lead a dialogue on digital application from a macrosocial perspective in interdisciplinary teams with health experts and technicians,
are able to lead discussions on technology impact assessments,
become aware of structures of digital inequality.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to independently analyse selected processes of social change in a digitalised society and thereby establish the reference to health data,
are able to independently examine selected case examples in the context of society and digitalisation,
are able to independently formulate a hypothesis on an observed technical-social phenomenon.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Society (societal terms) undergoing change
Sociotechnical systems – interactions of technology (especially digitalisation) and society
Social/digital inequality – digital natives, digital immigrants and digital competence
Change of privacy and publicity in the digital age
Extent, consequences and regulation requirements of social scoring
Exemplary analysis of phenomenon/scenes/life-worlds in the context of digital data practices</td></tr>
<tr><td>Course type(s):</td><td colspan="2">4 WSH project study + 2 WSH exercise</td></tr>
<tr><td>Teaching methods:</td><td colspan="2">Seminar group work, lectures, discussions</td></tr>
</table>

Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of an oral examination in which the students are to recall and remember (unaided) various theories and findings of the social sciences, in particular technology sociology. In addition, they are supposed to be able to apply these theories and findings to real-life questions and describe new research- and application-oriented tasks, define corresponding goals and approaches to solutions while reflecting their potential consequences. Duration: 20 minutes
Applicability of the module	• Belongs to the competence thread "Data and Digitalisation Competence"
(Basic) literature:	• Häußling, R. (2014). Techniksoziologie. Baden-Baden: Nomos. • Simonis, G. (2013). Konzepte und Verfahren der Technikfolgenabschätzung. Wiesbaden: VS-Verlag. • Süssenguth, F. (ed.) (2015). Die Gesellschaft der Daten. Über die digitale Transformation der sozialen Ordnung. Bielefeld: transcript Verlag. • Zillien, N. (2009). Digitale Ungleichheit. Neue Technologien und alte Ungleichheiten in der Informations- und Wissensgesellschaft. Wiesbaden: VS-Verlag.

<table>
<tr><td>Module: GuDi 24</td><td colspan="2">Title: Legal Foundations of the Healthcare System</td></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Law in the Context of Health</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 6 CP</td><td rowspan="3">Total work effort: 180 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 120 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: none</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to name central legal terms and laws of the Federal Republic of Germany and the EU in the context of health,
are able to outline the organisation of legal structures and institutions in Federal Republic of Germany which are relevant to action fields in the context of health, data and digitalisation,
are able to name the basic principles and legal framework conditions of social security and the organisation of the German healthcare system.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are able to understand legal texts in the context of health, data and digitalisation interpretatively and demonstrate their significance,
are able to structure the fields of law professionally relevant to them, draw distinctions between them and thus make cross-references,
are capable of searching legal texts and interpretations for various topics in the context of health, data and digitalisation and applying them to legal issues,
are able to identify legal structures, systems and contacts for cooperation purposes.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
are able to critically examine legally relevant statements of target groups and decision-makers against the background of their professional knowledge and exchange views with experts and decision-makers in a professionally sensible manner,
are able to recognise their own professional limitations and refer to other offices/institutions.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to independently formulate legal questions for the thematic field of health, data and digitalisation and develop associated argumentations,
are able to transfer and apply their legal knowledge to practically relevant problems in the context of health, data and digitalisation and develop reasonable, professionally well-founded approaches to solutions,
are able to independently search legal texts, commentaries, judicial verdicts as well as their substantiations on various topics.</td></tr>
<tr><td>Subjects of the module:</td><td colspan="2">Legal structures and institutions of the Federal Republic of Germany
Systematics and fundamental principles of the pertinent fields of law
Basic knowledge of constitutional law (welfare state principle)
Basic knowledge of the social codes
Basic knowledge of the legal fields of social law, general administrative law in North Rhine-Westphalia (NRW), communal law NRW and constitutional law
Basic knowledge of European law references considering the directives and regulations as well as other decisions of the European Commission</td></tr>
</table>

Course type(s):	2 WSH lecture + 2 WSH seminar
Teaching methods:	Seminar group work, front-of-class teaching, exercises for case solutions
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a written examination in which the students are to recall and remember the legal principles of various legal questions pertaining to the health and social system. In addition, they are supposed to be able to apply these legal principles to concrete questions and case examples taken from the context of health, data and digitalisation as well as describe new application-oriented tasks, define corresponding goals and approaches to solutions while reflecting their potential consequences. Duration: 90 minutes
Applicability of the module	• Belongs to the competence thread "Application-Related Health Knowledge"
(Basic) literature:	• Busse, R., Blümel, M., Ognyanova, D. (2013). Das deutsche Gesundheits-system. Akteure, Daten, Analysen. Berlin: Mwv-Verlagsgesellschaft. • Eichenhofer, E. (2012). Sozialrecht (8th edition). Tübingen: Mohr Siebeck • Grunewald, B. (2014). Gesellschaftsrecht (9th edition). Tübingen: Mohr Siebeck. • Riedel. R., Schulenberg, D. (ed.) (2011). Wichtige Rechtstexte des Gesundheitswesens. Herne: NWB-Verlag. • Schmidt, R. (2014). Allgemeines Verwaltungsrecht. Grundlagen des Verwaltungsverfahrens. Staatshaftungsrecht (17th edition). Grasberg: Schmidt. • Sozialgesetzbuch. Beck-Texte im dtv. Munich. • Waltermann, R. (2012). Sozialrecht (10th edition). Heidelberg: Müller

<table>
<tr><th>Module: GuDi 25</th><th colspan="2">Title: Bachelor's Thesis and Colloquium</th></tr>
<tr><td>Module responsibility:</td><td colspan="2">Chair of Research Methods in the Context of Health (Focus: Qualitative Methods), Chair of Research Methods in the Context of Health (Focus: Quantitative Methods)</td></tr>
<tr><td>Qualification level: Bachelor</td><td>Semester: summer semester</td><td>Module type:
Compulsory module</td></tr>
<tr><td rowspan="3">Credit points (ECTS): 15CP</td><td rowspan="3">Total work effort: 450 hours</td><td>of which is contact time: 60 hours</td></tr>
<tr><td>of which is self-study time: 390 hours</td></tr>
<tr><td>of which is practice: 0 hours</td></tr>
<tr><td colspan="2">Duration and frequency: 1x per semester, annually</td><td>Language: German</td></tr>
<tr><td colspan="3">Conditions for module attendance: Achievement of at least 120 ECTS credit points</td></tr>
<tr><td>Goals of qualification / competences:</td><td colspan="2">Knowledge: The students
are able to display their well-founded knowledge in their approach to scientific working and to specifically apply the techniques and methods of scientific working they have learned,
show that they are capable to work independently on theoretical and/or application-oriented questions in the context of health data and digitalisation,
are aware of research methods applicable to answer their research question and are able to substantiate their choice scientifically.</td></tr>
<tr><td></td><td colspan="2">Skills: The students
are able to delimit the object of their study to a central question and research methodology and to formulate a question to be answered in the scope of the Bachelor's thesis,
are capable to search suitable literature and prioritise found sources depending on the chosen question,
are able to present in a structured manner the previous state of research relating to their study object and justify their research question on this basis,
elaborate the question they selected pursuant to the criteria of scientific procedure within a given timeframe,
are capable to assess the plausibility of their results,
are able to present and defend their work in a scientific expert talk.</td></tr>
<tr><td></td><td colspan="2">Social competence: The students
present their research questions, methods and results with target-group orientation and argumentatively defend them against both a scientific professional audience and laypersons,
develop a reasoned opinion on a research topic, present it argumentatively and defend it against a professional audience,
independently reflect and discuss the chances and limitations of their own research work in a specialist discourse,
are able to assess the ethical relevance of research data and draw conclusions from them for their own research actions.</td></tr>
<tr><td></td><td colspan="2">Self-reliance: The students
are able to independently derive research questions for required needs,
are capable to classify research questions related to health data and digitalisation on their own in a scientific context,
are able to independently assess, select and apply appropriate methods and tools from a pool of available methods and research designs.</td></tr>
</table>

Subjects of the module:	• Development of a scientific question • Formulation of a concept to work on the question and derivation of a research design • Execution of a research process and processing the results • Ethical reflection of the methodical procedure
Course type(s):	4 WSH exercises (equivalent to the Bachelor's colloquium)
Teaching methods:	Self-study, utilisation of counselling, presentation and discussion, writing workshop
Requirements to be fulfilled for the award of credit points (module exam, scope and duration of exam):	The module examination consists of a Bachelor's thesis. With the module examination the students prove that they are able to independently cope with the requirements of developing a research question, deriving an appropriate design and conducting a study on the level of a Bachelor's thesis. In addition, the students prove that they are trained to apply the standards of scientific work including citation and source work. Length: max. 40 pages Processing time: 12 weeks
Applicability of the module	• Belongs to the competence thread "Practice and Project Competence "
(Basic) literature:	• Brink, A. (2013). Anfertigung wissenschaftlicher Arbeiten. Ein prozessorientierter Leitfaden zur Erstellung von Bachelor-, Master- und Diplomarbeiten (5th edition). Springer. • Eco, U. (2010). Wie man eine wissenschaftliche Abschlussarbeit schreibt (13th edition). UTB. • Krajewski, M. (2013). Lesen, Schreiben, Denken. Zur wissenschaftlichen Abschlussarbeit in 7 Schritten. UTB. • Töpfer, A. (2012). Erfolgreich Forschen. Ein Leitfaden für Bachelor-, Master-Studierende und Doktoranden (3rd edition). Springer.