Module Catalogue
for the Subject
Clinical Research and Epidemiology
with the degree "Begleitstudium"
(90 ECTS credits)

Examination regulations version: 2012
Responsible: Faculty of Medicine
Contents

The subject is divided into
Abbreviations used, Conventions, Notes, In accordance with 3

Compulsory Courses
Introduction in epidemiology and biometry 6
Introduction in epidemiological and biometrical methods 1 7
Introduction in epidemiological and biometrical methods 2 8
Advanced biostatistical methods 9
Advanced epidemiological methods 10
How to read a paper 11
Practical training clinical research 1 12
Practical training clinical research 2 13
Colloquium clinical research 1 14
Colloquium clinical research 2 15

Compulsory Electives
Clinical trial methodology 16
Introduction in clinical research questions 17
Transferable skills training 18
Evidence based medicine 19
Diseasespecific epidemiology 20
Health services research 21
Prognostic modelling 22

The subject is divided into

<table>
<thead>
<tr>
<th>section / sub-section</th>
<th>ECTS credits</th>
<th>starting page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory Courses</td>
<td>60</td>
<td>5</td>
</tr>
<tr>
<td>Compulsory Electives</td>
<td>30</td>
<td>16</td>
</tr>
</tbody>
</table>
Abbreviations used

Course types: E = field trip, K = colloquium, O = conversatorium, P = placement/lab course, R = project, S = seminar, T = tutorial, Ü = exercise, V = lecture

Term: SS = summer semester, WS = winter semester

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

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

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

Conventions

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

Notes

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

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

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

In accordance with

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

frei

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

24-Oct-2012 (2012-174)

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

(60 ECTS credits)
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction in epidemiology and biometry</td>
<td>03-KFE-1-122-m01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Clinical Epidemiology and Biometry (ICE-B)</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
<td>--</td>
</tr>
</tbody>
</table>

### Contents

Foundations of clinical and epidemiological research; fundamental concepts of diagnostics and their application; meaning and computation of epidemiological risk measures.

### Intended learning outcomes

The students have developed a fundamental knowledge on questions of clinical research and epidemiology, on study designs as well as potential sources of and measures against bias of study results. They are familiar with performance parameters of diagnostic tests and are able to provide quantitative interpretations of diagnostic test results. They are also familiar with fundamental epidemiological risk measures and are able to compute them from data.

### Courses

<table>
<thead>
<tr>
<th>Type, number of weekly contact hours, language — if other than German</th>
</tr>
</thead>
<tbody>
<tr>
<td>V + Ü (no information on SWS (weekly contact hours) and course language available)</td>
</tr>
</tbody>
</table>

### Method of assessment

<table>
<thead>
<tr>
<th>Type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus</th>
</tr>
</thead>
<tbody>
<tr>
<td>written examination (approx. 60 minutes) and oral examination (approx. 25 minutes)</td>
</tr>
</tbody>
</table>

### Allocation of places

--

### Additional information

--

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

--
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction in epidemiological and biometrical methods 1</td>
<td>03-KFE-2-122-m01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Clinical Epidemiology and Biometry (ICE-B)</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
<td>--</td>
</tr>
</tbody>
</table>

### Contents
Basics of the statistical software SPSS; data preparation; descriptive statistics; basic methods of inference statistics.

### Intended learning outcomes
The students are able to create data tables, to import and export data, to pool and merge as well as to transform and recode data. They have learned to describe data numerically by statistical measures and to represent it graphically. They are familiar with significance tests and confidence estimates as well as fundamental methods for one and two-sample problems.

### Courses (type, number of weekly contact hours, language — if other than German)
S (no information on SWS (weekly contact hours) and course language available)

### Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
seminar paper (approx. 10 pages)

### Allocation of places
--

### Additional information
--

### Referred to in LPO I (examination regulations for teaching-degree programmes)
--
## Module Catalogue for the Subject
Clinical Research and Epidemiology

### Module: Introduction in epidemiological and biometrical methods 2

<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction in epidemiological and biometrical methods 2</td>
<td>03-KFE-3-122-m01</td>
</tr>
</tbody>
</table>

### Module Coordinator
Institute of Clinical Epidemiology and Biometry (ICE-B) - Faculty of Medicine

### ECTS
5

### Method of Grading
Numerical grade

### Only after succ. compl. of module(s)
--

### Duration
1 semester

### Module Level
Graduate

### Other Prerequisites
--

### Contents
Statistical modelling by multiple regression for metric, binary, ordinal and survival data.

### Intended Learning Outcomes
The students perform multiple regression analyses by the general linear model, binary and ordinal logistic regression as well as Cox regression (including time-dependent covariates) and are able to test for interaction effects.

### Courses
S (no information on SWS (weekly contact hours) and course language available)

### Method of Assessment
Seminar paper (approx. 10 pages)

### Allocation of Places
--

### Additional Information
--

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

--
**Module title**

Advanced biostatistical methods

**Abbreviation**

03-KFE-4-122-m01

**Module coordinator**

Institute of Clinical Epidemiology and Biometry (ICE-B)

**Module offered by**

Faculty of Medicine

**ECTS**

5

**Method of grading**

Numerical grade

**Only after succ. compl. of module(s)**

03-KFE-1 and 03-KFE-2 and 03-KFE-3

**Duration**

1 semester

**Module level**

Graduate

**Other prerequisites**

--

**Contents**

Complex analyses of larger data sets to solve topical research questions; creation of tables and figures suitable for presentation in a scientific publication; additional statistical methods will be taught as needed for the specific task.

**Intended learning outcomes**

The students become familiar with a topical research question and the related data set. They perform all statistical analyses to answer the questions and learn to present the results in tables and figures. They also contribute to presenting the statistical methods and results, aiming at a co-authorship of a scientific publication in a peer-reviewed journal.

**Courses**

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

**Method of assessment**

Presentation (approx. 45 minutes) and written examination (approx. 60 minutes)

Language of assessment: German, English

**Allocation of places**

--

**Additional information**

--

**Referred to in LPO I**

(examination regulations for teaching-degree programmes)

--
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced epidemiological methods</td>
<td>03-KFE-5-122-m01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Clinical Epidemiology and Biometry (ICE-B)</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>03-KFE-1 and 03-KFE-2 and 03-KFE-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 semester</td>
<td>graduate</td>
<td>--</td>
</tr>
</tbody>
</table>

**Contents**

Further aspects of study design; analysis of the relationship between risk factors and outcome; fundamental concept of evidence-based medicine.

**Intended learning outcomes**

In further discussions of design aspects, the students learn how to purposefully use methodological elements to answer research questions and to assure the quality of study data. They perform numerical analyses to quantify the relationship between risk factor and outcome in the given study context and assess the evidence arising from the data.

**Courses**

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

**Method of assessment**

presentation (approx. 45 minutes) and seminar paper (approx. 5 pages)

Language of assessment: German, English

**Allocation of places**

--

**Additional information**

--

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

--
### Module title
How to read a paper

### Abbreviation
03-KFE-6-122-m01

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Clinical Epidemiology and Biometry (ICE-B)</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>03-KFE-1 and 03-KFE-2 and 03-KFE-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>graduate</td>
<td>--</td>
</tr>
</tbody>
</table>

### Contents
Attendance of the course "How to read a paper"; seminar paper in the form of a paper review.

### Intended learning outcomes
The students know the requirements regarding the structure and content of publications in the context of various study designs. They also know typical pitfalls for authors and readers. By writing a review on a published paper, they have practised to critically reflect strengths and shortcomings of scientific work.

### Courses (type, number of weekly contact hours, language — if other than German)
S (no information on SWS (weekly contact hours) and course language available)

### Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
presentation (approx. 45 minutes) and seminar paper (approx. 5 pages)
Language of assessment: German, English

### Allocation of places
--

### Additional information
--

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

Practical training clinical research 1

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Clinical Epidemiology and Biometry (ICE-B)</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>numerical grade</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>graduate</td>
<td>--</td>
</tr>
</tbody>
</table>

## Contents

Four-week practical training in a clinical or epidemiological research unit. Written summary of research topics the participant was involved in, of experiences and newly acquired knowledge and skills, and critical reflection of the practical training.

## Intended learning outcomes

The students acquire practical experience in all domains of the real world of studies. This includes preparation of studies and study documents, data acquisition (including examination of study participants), data management, data checks, study logistics etc. In the summary report, students relate their newly acquired experience to the theoretical matter studied so far and learn about the practical meaning of theoretical issues.

## Courses

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

## Method of assessment

placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 5 pages)

Language of assessment: German, English

## Allocation of places

--

## Additional information

--

## Referred to in LPO I

(examination regulations for teaching-degree programmes)

--
Module title | Abbreviation
--- | ---
Practical training clinical research 2 | 03-KFE-16-122-m01

Module coordinator | Module offered by
Institute of Clinical Epidemiology and Biometry (ICE-B) | Faculty of Medicine

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>numerical grade</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>graduate</td>
<td>--</td>
</tr>
</tbody>
</table>

Contents

Four-week practical training in a clinical or epidemiological research unit. Written summary of research topics the participant was involved in, of experiences and newly acquired knowledge and skills, and critical reflection of the practical training.

Intended learning outcomes

The students acquire practical experience in all domains of the real world of studies. This includes preparation of studies and study documents, data acquisition (including examination of study participants), data management, data checks, study logistics etc. In the summary report, students relate their newly acquired experience to the theoretical matter studied so far and learn about the practical meaning of theoretical issues.

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

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

Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 5 pages)
Language of assessment: German, English

Allocation of places

--

Additional information

--

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

--
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colloquium clinical research 1</td>
<td>03-KFE-15-122-m01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Clinical Epidemiology and Biometry (ICE-B)</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>03-KFE-14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>graduate</td>
<td>--</td>
</tr>
</tbody>
</table>

**Contents**

Regular attendance of the colloquium and contributions to the discussion; presentation of the participant's own practical training in a talk.

**Intended learning outcomes**

The colloquium talk provides students with an opportunity to review what they have learned in the practical course. During the talk and discussion with their classmates, students will be able to practise their communication skills. The presentation of the individual topics will provide all participants with more in-depth insights into the real world of studies.

**Courses**

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

**Method of assessment**

presentation (approx. 30 minutes) and seminar paper (approx. 5 pages)  
Language of assessment: German, English

**Allocation of places**

--

**Additional information**

--

**Referred to in LPO I**

(examination regulations for teaching-degree programmes)

--
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colloquium clinical research 2</td>
<td>03-KFE-17-122-m01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Clinical Epidemiology and Biometry (ICE-B)</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>03-KFE-16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>graduate</td>
<td>--</td>
</tr>
</tbody>
</table>

**Contents**

Regular attendance of the colloquium and contributions to the discussion; presentation of the participant's own practical training in a talk.

**Intended learning outcomes**

The colloquium talk provides students with an opportunity to review what they have learned in the practical course. During the talk and discussion with their classmates, students will be able to practise their communication skills. The presentation of the individual topics will provide all participants with more in-depth insights into the real world of studies.

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

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

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

presentation (approx. 30 minutes) and seminar paper (approx. 5 pages)

Language of assessment: German, English

**Allocation of places**

--

**Additional information**

--

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

--
Compulsory Electives
(30 ECTS credits)
Module title  
Clinical trial methodology  

Abbreviation  
03-KFE-7-122-m01  

Module coordinator  
Institute of Clinical Epidemiology and Biometry (ICE-B) / Centre for Clinical Studies  

Module offered by  
Faculty of Medicine  

ECTS  
5  

Method of grading  
Numerical grade  

Only after succ. compl. of module(s)  
03-KFE-1 and 03-KFE-2 and 03-KFE-3  

Duration  
1 semester  

Module level  
Undergraduate  

Other prerequisites  
--  

Contents  
Attendance of the certified course for clinical investigators offered by the Clinical Trial Centre Würzburg.  

Intended learning outcomes  
Participants are familiar with the fundamental principles of good clinical practice, legal requirements for drug and medical device studies and other regulatory aspects. They are also familiar with requirements regarding the study protocol, the conduct of a study, data management and quality assurance.  

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

Method of assessment  
Presentation (approx. 45 minutes) and seminar paper (approx. 5 pages)  

Language of assessment: German, English  

Allocation of places  
--  

Additional information  
--  

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

--
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction in clinical research questions</td>
<td>03-KFE-8-122-m01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Clinical Epidemiology and Biometry (ICE-B)</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>--</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 semester</td>
<td>graduate</td>
<td>--</td>
</tr>
</tbody>
</table>

**Contents**

Regular attendance of the research seminar of the Institute of Clinical Epidemiology and Biometry and/or a cooperating institution; talk delivered by participants.

**Intended learning outcomes**

The students actively participate in the discussion of topical (internationally relevant) research. Delivering a presentation on a topic of their choice, students have learned to select relevant sources, to prepare them for presentation and to develop a critical view on published material.

**Courses**

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

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

**Method of assessment**

(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

presentation (approx. 45 minutes) and seminar paper (approx. 5 pages)

Language of assessment: German, English

**Allocation of places**

--

**Additional information**

--

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

--
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transferable skills training</td>
<td>03-KFE-9-122-m01</td>
</tr>
</tbody>
</table>

**Module coordinator**

Institute of Clinical Epidemiology and Biometry (ICE-B) / Graduate School of Life Sciences

**Module offered by**

Faculty of Medicine

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>03-KFE-1 and 03-KFE-2 and 03-KFE-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>undergraduate</td>
<td>--</td>
</tr>
</tbody>
</table>

**Contents**

Attendance of a transferable skills course of the participant's choice offered by the GSLS.

**Intended learning outcomes**

The students acquire and extend their technical skills in scientific work such as writing papers, giving talks, professional poster design, literature search etc.

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

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

**Method of assessment** (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

log (approx. 2 pages)
Language of assessment: German, English

**Allocation of places**

--

**Additional information**

--

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

--
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence based medicine</td>
<td>03-KFE-10-122-m01</td>
</tr>
</tbody>
</table>

### Module coordinator

<table>
<thead>
<tr>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Clinical Epidemiology and Biometry (ICE-B)</td>
</tr>
<tr>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>03-KFE-1 and 03-KFE-2 and 03-KFE-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>graduate</td>
<td>--</td>
</tr>
</tbody>
</table>

### Contents

- Systematic reviews and meta-analyses; aims of clinical guidelines.

### Intended learning outcomes

The students assess evidence from several sources. They are familiar with methods of systematic review of existing evidence and meta-analysis. They have developed a background knowledge about the development of clinical guidelines.

### Courses

<table>
<thead>
<tr>
<th>S (no information on SWS (weekly contact hours) and course language available)</th>
</tr>
</thead>
</table>

### Method of assessment

- Presentation (approx. 45 minutes) and seminar paper (approx. 5 pages)
- Language of assessment: German, English

### Allocation of places

--

### Additional information

--

### Referred to in LPO I

(examination regulations for teaching-degree programmes)

--
### Module Catalogue for the Subject
### Clinical Research and Epidemiology

<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseasesspecific epidemiology</td>
<td>03-KFE-11-122-m01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module coordinator</th>
<th>Module offered by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Clinical Epidemiology and Biometry (ICE-B) / Comprehensive Heart Failure Center</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>03-KFE-1 and 03-KFE-2 and 03-KFE-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration</th>
<th>Module level</th>
<th>Other prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>graduate</td>
<td>--</td>
</tr>
</tbody>
</table>

### Contents

Attendance of two courses of the Winter School in Epidemiology; selected topics of disease-specific research are presented in lectures and discussed in seminars.

### Intended learning outcomes

The students develop an understanding of the specific implementation of general methods and techniques in the context of disease-specific research. In the joint sessions of students, young clinicians and scientists as well as academic teachers, they practise the interdisciplinary exchange of thoughts and knowledge in a workshop atmosphere.

### Courses

<table>
<thead>
<tr>
<th>(type, number of weekly contact hours, language — if other than German)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S (no information on SWS (weekly contact hours) and course language available)</td>
</tr>
</tbody>
</table>

### Method of assessment

<table>
<thead>
<tr>
<th>(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>presentation (approx. 45 minutes) and seminar paper (approx. 5 pages) Language of assessment: German, English</td>
</tr>
</tbody>
</table>

### Allocation of places

--

### Additional information

--

### Referred to in LPO 1

(examination regulations for teaching-degree programmes)

--
<table>
<thead>
<tr>
<th>Module title</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health services research</td>
<td>03-KFE-12-122-m01</td>
</tr>
</tbody>
</table>

**Module coordinator**
Institute of Clinical Epidemiology and Biometry (ICE-B)

**Module offered by**
Faculty of Medicine

**ECTS** | **Method of grading** | **Only after succ. compl. of module(s)** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>numerical grade</td>
<td>03-KFE-1 and 03-KFE-2 and 03-KFE-3</td>
</tr>
</tbody>
</table>

**Duration** | **Module level** | **Other prerequisites**
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 semester</td>
<td>graduate</td>
<td></td>
</tr>
</tbody>
</table>

**Contents**
Special aspects of studies on quality assurance and health services; discussion of examples from recent publications.

**Intended learning outcomes**
The students know the specific requirements for studies in health service research. They take into account these particularities when defining study questions, choosing suitable study designs and appropriate statistical methods which are distinct from approaches in other epidemiological or clinical studies.

**Courses**
S (no information on SWS (weekly contact hours) and course language available)

**Method of assessment**
presentation (approx. 45 minutes) and seminar paper (approx. 5 pages)
Language of assessment: German, English

**Allocation of places**
--

**Additional information**
--

**Referred to in LPO I** (examination regulations for teaching-degree programmes)
--
### Module title
Prognostic modelling

### Abbreviation
03-KFE-13-122-m01

### Module coordinator
Institute of Clinical Epidemiology and Biometry (ICE-B) / Comprehensive Heart Failure Center

### Module offered by
Faculty of Medicine

### ECTS
5

### Method of grading
numerical grade

### Only after succ. compl. of module(s)
03-KFE-1 and 03-KFE-2 and 03-KFE-3

### Duration
1 semester

### Module level
graduate

### Other prerequisites
--

### Contents
Examples of prognostic modelling from literature will be studied in seminars; practical exercises.

### Intended learning outcomes
The students practise performing prognostic analyses and developing prognostic scores. They know common characteristics and differences between prognostic questions and analyses in comparison to diagnostic and etiologic research.

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

### Method of assessment
presentation (approx. 45 minutes) and seminar paper (approx. 5 pages)
Language of assessment: German, English

### Allocation of places
--

### Additional information
--

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

--