First year courses

**Research Master Health Sciences Year 1**

Fac. Health, Medicine and Life Sciences

**Introduction to Epidemiology**

**Full course description**

This is the first module in the Epidemiology and Health Sciences Research master's programmes and will take place during a 4-day period in which the participants will be acquainted with the basic principles of epidemiological research. These include measures of disease frequency and exposure measurement, basic health measurement (clinimetrics), basic study design (including randomized controlled trials, cohort studies, case control studies, and cross-sectional studies), measures of association, validity and bias in epidemiological research, and a brief introduction of systematic literature review/meta-analysis. Introduction to epidemiology

The course

The main aims of the course are to enable the participants to appreciate the basic concepts of epidemiology and critically assess epidemiological studies (e.g., research papers or research protocols). For this, use will be made of lectures, group discussions, and small practical individual or group assignments (e.g., questions or calculations related to the topic of the preceding lecture).

will be attended by students of the Epidemiology and Health Sciences Research master's programmes. Introduction to epidemiology

Besides these students, the course will be available as a stand-alone course for anyone who wants to become acquainted with basic epidemiological methods, among them students of other master's programmes.

**Course objectives**

Knowledge and understanding

The course participant:

- Is able to distinguish between various measures of frequency of health outcomes (i.e. cumulative incidence, incidence density, point prevalence, period prevalence, life-time prevalence)
- Has basic knowledge of and insight into the principles of classifying health and disease outcomes
- Is able to distinguish between the various types of health measurement scales and the relevant aspects of the quality of a health measurement scale (i.e. validity, reliability, sensitivity-to-change)
- Is able to distinguish between various measures that quantify the strength of association between determinants and health outcomes (i.e. risk difference, risk ratio, rate ratio, attributable proportion)
Research Master in Health Sciences

- Is able to distinguish between various study designs in epidemiology (i.e. ecological studies, cross-sectional studies, cohort studies, case-control studies, and randomized controlled trials)
- Has knowledge of and insight into relevant aspects of the design/choice of the study population (e.g., inclusion and exclusion criteria, eligibility considerations, source for selection, recruitment procedures).
- Is able to identify the major advantages and disadvantages of the different epidemiological study designs
- Knows the difference between internal validity and external validity of epidemiological studies
- Appreciates the potential threat of bias (selection bias, information bias, confounding) to the internal validity of an epidemiological study.
- Appreciates the difference between confounding and effect modification (interaction).
- Appreciates various design measures to prevent bias or to adjust for bias in observational research (restriction, matching, standardization, stratified analysis, blinded measurement, use of independent data sources)
- Has basic knowledge of and insight into the main principles and procedures of diagnostic test (strategy) development and evaluation
- Is able to distinguish between the various types of literature review (e.g., narrative review, systematic review, meta-analysis) and to identify the advantages and disadvantages of these types of literature review
- Is able to identify the subsequent steps of a systematic literature review.

Making judgments

- The course participant is able to recognize and assess the general quality of an epidemiological study (e.g., a research protocol or a research paper)

Recommended reading

There are various aspects to take into consideration when constructing an RCT and many of the issues involved will be discussed in lectures, through practical and discussion groups: design options, issues in good clinical practice such as informed consent, blinding, process evaluation, power calculation and randomization, missing values and data-analyses in general.

As there are many potential errors associated with health services research, this module will focus on various key features of RCT design, with particular emphasis on design, validity and data-analysis. A well-designed, methodologically sound RCT evaluating an intervention can provide strong evidence of a cause-effect relation if one exists. These studies are often used to chance practice and taken up in guidelines, being the ultimate goal of research on therapeutic effectiveness. On the other hand, poorly designed studies are dangerous because of their potential to influence practice based on flawed methodology.

The umbrella term ‘intervention study’ refers to those study designs in which one or more independent variables are manipulated by the investigator, whereas the other independent variables are kept constant or controlled at the same time. This ‘experimental’ approach is regarded the most
Research Master in Health Sciences

powerful study design for discovering causal relationships and can be the sturdiest ways of doing research, however, has many ethical and design issues to be taken into account. This module will focus on experimental research in human beings outside the laboratory. ‘Clinical trial’ is a common name to indicate this type of experiments especially as it is often used to assess the efficacy and effectiveness of a new treatment for patients.

Course objectives

Knowledge and understanding

Ability to distinguish between various classes of intervention studies (e.g. pre-experimental, quasi-experimental and true experimental designs; parallel group designs, cross-over designs, N-of-1 design, non-inferiority trials etc). 1.

Knowledge of and insight into the rationale of and prerequisites for experimental intervention research. 2.

Knowledge of the historical development of intervention trials. 3.

Ability to identify the core elements of the ‘classic’ intervention study design (RCT = parallel, placebo-controlled, double-blind, randomized trial): choice of study subjects (in- and exclusion criteria, study size), choice of outcome measures and follow-up time (PICOT). Ability to choose intervention strategies and contrasts, informed consent procedure, randomization, prestratification, blinding, dealing with protocol deviations (drop-outs, non-compliance, missing values), registration of (serious) adverse events. 4.

Ability to distinguish between various alternative intervention study designs (e.g., cross-over design, factorial design, Latin square design, prerandomization design (Zelen design), sequential analysis approaches, N of 1 trial designs, group-randomized trial design). 5.

Ability to distinguish between alternative methods of random allocation of trial participants: adaptive vs. fixed allocation randomization procedures (e.g., simple randomization, stratified randomization, block randomization, response randomization, replacement randomization, biased coin method, minimization, balancing, unequal randomization). 6.

Knowledge of and insight into relevant aspects of the design/choice of the study population (e.g., inclusion and exclusion criteria, eligibility considerations, source for selection, recruitment procedures, patient registration). 7.

Knowledge of and insight into relevant aspects of the design/choice of the intervention (e.g., treatment schedule (route of administration, dosage, duration), intervention contrast (placebo, usual care), dealing with co-interventions). 8.

Knowledge of and insight into relevant aspects of the design/choice of outcome measurement (e.g., primary vs. secondary outcome measures, timing of measurements, quality aspects (validity, reliability, sensitivity-to-change / responsiveness), intended vs. unintended effects). 9.

Ability to identify pros and cons of a run-in period (qualification period). 10.

Knowledge of and insight into the role of placebo intervention within the context of a randomized trial. 11.
Research Master in Health Sciences

Knowledge and insight into the characteristics and differences between pragmatic and explanatory designs regarding designing, performing and interpreting the results of such trials 12.

Knowledge and understanding of the so-called mixed methods designs. Designs were a combination of quantitative and qualitative research methods are used 13.

Knowledge, understanding and skills regarding procedures that deal with protocol violations. 14.

Knowledge of and insight into strategies and procedures of statistical analysis of intervention trial results (e.g., intention-to-treat vs. per-protocol (valid cases) analysis, appropriate statistical techniques). 15.

Knowledge, understanding and skills regarding procedures for sample size and power calculation in intervention trials and more in general. 16.

Ability to interpret the results of an intervention trial and to draw balanced conclusions with respect to the effectiveness of an intervention. 17.

Knowledge of and insight into the requirements for intervention trial protocols and reports. 18.

Knowledge of and insight into planning, organizational, administrative and other practical aspects of intervention trials (e.g., documentation, design of forms, standard operating procedures (SOPs), data management, audits, multicentre trials). 19.

Knowledge of and insight into the ethical and legislative aspects of intervention trials (e.g., METC-procedures, WMO, GCP, international harmonization, requirements). 20.

Recommended reading

Research Master in Health Sciences

- C.H.G. Heuts - Bastiaenen

Teaching methods:
Assignment(s), Lecture(s), Work in subgroups, PBL, Skills, Paper(s)

Assessment methods:
Assignment, Attendance, Written exam

Keywords:
Randomized controlled trials, Pragmatic versus Explanatory trials, experiment, Randomisation, bias
Fac. Health, Medicine and Life Sciences

**Acquiring Advanced Professional Skills (part 1)**

**Full course description**

Research proposal, scientific English course). the writing development, (portfolio module this for ‘Writing a research proposal’ winds up the first year as a complete module. Hence, parts of this module are provided to make the requirements of the separate courses for the research master students more severe (journal clubs, research orientation), other parts of this programme are specific course sciences researchers, and linked with the health future of education the for essential be to considered be the student and his supervisors. To meet these wishes we have chosen, for practical reasons, to set up a separate ‘third-stream’ module ‘Acquiring advanced professional skills’, which comprises elements that can by student the of development professional the upon reflection well as critical as taught be need for scientific integrity to reaccreditation committee emphasized the KNAW The Health Sciences Research master’s programme shares part of its modules with the Epidemiology master’s programme. Initially, the KNAW has commanded that modules from the ‘regular’ Epidemiology programme can be used, be it under the express condition that the end terms of the modules were made more severe for the HSR master’s students. Also the

Advanced Professional skills, but also the parts to stiffen the requirements of the separate regular courses according to the guidelines of the KNAW. Acquiring course entire the of elements core the only encompasses not RHS4020 2. year in RHS5020 and 1 year in given is RHS4020 years where two over spread is skills Professional Advanced Acquiring

The course Acquiring Advanced Professional Skills consists of several subparts:

- Writing a research protocol (EPI4927)) course the of sessions training skills and lectures
- Writing the research protocol for the placement in year 2 (making use of the
- Writing scientific English
- professional behavior, lectures on research integrity) on reflection plan, development
- personal a of Development and evaluation of a portfolio (including 360 degree feedback, development
- Journal club
- Orientation of the research performed in the field of Health Sciences

**Course objectives**

**Knowledge and understanding:**

- Students learn about the contents of the various elements of a research proposal
- Students learn about various research and funding agencies, their strategies and procedures,
Applying knowledge and understanding:

- Students learn how to write and submit a research proposal in the wide field of health sciences research
- Students have the ability to review and assess the quality of existing research protocols

Making judgements:

- Student acts and complies with existing academic values, principles and rules to the best of one’s knowledge.
- Student can show that he or she critically evaluates his or her own behavior, viewpoints and methods and is open to evaluation by others.

Communication:

- Students learn how to write a research protocol
- Students can resent their research project for an audience of teachers and fellow-students.
- Student is able to ask for, receive and use in feedback a constructive attitude.

Skills for further teaching:

- Students can apply the gained skills in a future research environment.
- Student shows a willingness to learn from evaluations by changing his or her behaviour, position or methods.

RHS4020
Year
3 Sep 2018
5 Jul 2019
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- C.J.A.W. van Gool - de Vrede

Teaching methods:
Assignment(s), Lecture(s), Work in subgroups, PBL, Presentations, Research, Training(s), Working visit(s)
Assessment methods:
Assignment, Attendance, Portfolio
Keywords:
Skills Profession Practical Work-place Science
Fac. Health, Medicine and Life Sciences

Advanced Statistical Analysis Techniques
Full course description

The major objective of this course is to prepare students optimally for the use of statistics in their practical work and the period after. The student is taught to apply the most commonly used statistical analysis techniques in a responsible way. Also should he be better able to judge the statistical facets of research as carried out by others.

The training aims at applying advanced statistical techniques in a responsible way. The emphasis will be on concepts underlying the statistical techniques and on interpreting the results, with the mathematics being kept to a minimum. The course material is primarily based on SPSS software. The use of R and STATA will only be briefly approached.

The following techniques will be treated

Analysis of variance and (co)variance

1. Linear regression
2. Logistic regression
3. Analysis of survival times
4. Analysis of repeated measures (linear multilevel models)

For each topic there are two lectures and two tutorials. During the first tutorial, theoretical issues are discussed while emphasis on the interpretation of results obtained with SPSS on real data sets is given in the second tutorial. Concerning the lectures, the first one is more theoretical and involves the presentation of the method and the assumptions behind. In particular, the consequences of violating the assumptions are investigated. The practical interpretation of software outputs is also of great interest. In the second part, we analyze a real dataset together and debate over the best choices to make to analyze the data. Then, we discuss how the results can be summarized to be presented to an audience with minimal statistical knowledge.

Course objectives

After completing this unit the participants should have acquired the knowledge and skills required for the independent use and critical assessment of various (multivariable) statistical analysis concepts, procedures and techniques which are prominent in epidemiological research:

1. Analysis of variance and covariance.
2. Linear regression analysis techniques
3. Logistic regression analysis for binary outcome variables
4. Analysis of survival data
5. Analysis of repeated measurements (linear multilevel models)

For each of this statistical technique, the participant should be able to deal with confounding, interaction and outliers, be aware of the assumptions underlying the use of the technique, know some advantages and disadvantages of the technique, interpret results and use dummy coding. The participant should also be able to choose an appropriate statistical analysis strategy, given a specific epidemiological research question and study design.

Recommended reading

Clinimetrics: from Biomarkers to Quality of Life

**Full course description**

This 8-week module deals with the various aspects of health measurement. Health is always the main (dependent) variable in epidemiologic research. By means of tutorial group discussions, lectures, and exercises the students will be made familiar with the various aspects of health (and exposure) measurement: the concept of health and the various dimensions of the health concept; the use of health and vital indicators in public health planning and evaluation; the organization of health-related information and the structure and practical use of a major disease classification system (ICF); various forms of national and international health registries; the structure and contents of (inter)national public health surveillance systems; the various types of health measurement scales that have been developed for health status measurement and health outcome evaluation; the main principles of measurement theory, in particular the theoretical underpinnings of health and exposure measurement (clinimetrics); the main criteria of the methodological quality of a health measurement scale including reliability, validity, responsiveness and interpretability; the steps in the development, field testing and evaluation of a health outcome measurement scale; and the main principles of diagnostic testing and population screening for disease. The module covers the range from biomarkers until quality of life.

Within this module students will start working on their thesis. After having chosen their thesis topic in October, students will have covered the basic knowledge they need, in terms of study designs, measurement instruments and statistics, to be able to specify the outline of their research proposal and prepare a well formulated research question (“outline and research question”). The moment in time for this activity within the whole master program is carefully chosen.
Course objectives

- Ability to distinguish between the various dimensions of health and vital indicators in public health planning and evaluation;
- Knowledge of and insight into the principles of classifying health and disease phenomena, and the use of health classification systems;
- Knowledge of and insight into the principles and methods of public health surveillance;
- Ability to distinguish between the various types of health measurement scales;
- Knowledge of and insight into the role of biological markers within the context of health measurement and health monitoring;
- Knowledge of and insight into the theory of health and exposure measurement (clinimetrics), and the relevant aspects of the quality of a health measurement scale (e.g., validity, reliability, sensitivity-to-change);
- Ability to distinguish between the subsequent steps in the development and evaluation of a health outcome measurement scale;
- Knowledge, insight and skills required for the critical evaluation of a health measurement scale;
- Knowledge of and insight into the main principles and procedures of diagnostic test (strategy) development and evaluation;
- Knowledge of and insight into the main principles and procedures of population screening of health problems and risk factors, and the evaluation of screening activities;
- Knowledge of other indicators of health measurement which are often used by policy makers, such as the quality-adjusted life years (QALYs), the disability-adjusted life years (DALYs), and the cost-of-illness;
- Knowledge of the concepts and measurement of outcomes beyond (health-related) quality of life, such as well-being, life satisfaction, and capabilities;
- Knowledge and insight of systematic reviews for health measures;
- Knowledge and insight of the full range of health measures (from biomarkers until quality of life measures);
- Knowledge and insight on how to formulate a research question;
- Basic knowledge of and insight into the outline of a(n epidemiological) research proposal.

Recommended reading

Research Master in Health Sciences
5.0
Instruction language: English
Coordinator:

- **E.M.J. van Soerland - Bols**

Teaching methods:
Assignment(s), Lecture(s), Work in subgroups, Presentations, Skills, PBL, Working visit(s)
Assessment methods:
Assignment, Attendance, Presentation, Written exam
Keywords:
validity, reliability, validity to change, responsiveness, Diagnostics, prognosis, evaluation, biomarkers, quality of life
Fac. Health, Medicine and Life Sciences

**Writing a Research Question and Outline**

EPI4930
Period 2
29 Oct 2018
21 Dec 2018
[Print course description](#)
ECTS credits:
1.0
Instruction language: English
Coordinator:

- **C.C.J.M. Simons**

Fac. Health, Medicine and Life Sciences

**General Principles of HTA & Trial-based Evaluation**

RHS4021
Period 3
7 Jan 2019
1 Feb 2019
[Print course description](#)
ECTS credits:
6.0
Instruction language: English
Coordinator:

- **S.M.A.A. Evers**

Fac. Health, Medicine and Life Sciences
Systematic Literature Review and Meta-analysis

Full course description

Both for epidemiological and health care researchers and for professionals who are expected to interpret and apply the results of scientific research, it is vital to be able to summarize and review the relevant literature in one’s own domain of interest in a systematic and checkable way. Nowadays a systematic literature review is the point of departure of almost every new research initiative, and upon completion the study results will often be incorporated in an updated version of the review. Systematic reviews are at the heart of evidence-based medicine and public health.

This module deals with the full scope of principles, concepts and methods of systematic literature reviewing, including meta-analysis (statistical pooling of outcomes of included component studies). By means of lectures, tutorial group meetings and workshops attention will be paid to issues like the various approaches to reviewing the literature; strengths and limitations of the systematic literature review; reviews dealing with various types of primary study (e.g., reviews on prevalence, observational, intervention, diagnostic, prognostic, clinimetric or economic evaluation studies); structure of a systematic review and steps in conducting a systematic review; strategies, tools and sources for searching the literature; qualitative and quantitative data extraction from retrieved publications; principles of methodological quality assessment of component studies (e.g., risk of bias assessment); tools for identification of publication bias; methods of (semi-)quantitative pooling of component study results (research synthesis, e.g., statistical pooling, best-evidence synthesis); assessment and exploration of heterogeneity of study results (e.g., outlier analysis, cumulative meta-analysis, metaregression analysis); levels of evidence and interpretation of review results; guidelines for systematic review protocol writing; guidelines for reporting on systematic review; computer software for meta-analysis; application of systematic review results to individual patient and public health care; infrastructure for health care reviewing and the role of the Cochrane Collaboration.

Course objectives

- Ability to distinguish between and mention the advantages and disadvantages of the various types of literature review
- Ability to tailor the principles of systematic literature review to the requirements of different study
Research Master in Health Sciences

- Ability to identify the subsequent steps of a systematic literature review
- Ability to distinguish between various literature search strategies and methods
- Ability to distinguish between various approaches and criteria lists for methodological quality assessment of component studies in a systematic review
- Ability to distinguish between quality assessment tools and reporting guidelines for the publication of scientific reports
- Ability to distinguish between various types of biased review outcome within the context of a systematic literature review, and between various approaches to prevent and diagnose publication bias
- Ability to identify the advantages and disadvantages of statistical pooling within the context of systematic literature review, and to distinguish between the various methods of pooled analysis
- Ability to distinguish between various sources of heterogeneity, various methods to identify heterogeneity, and various strategies to deal with heterogeneity within the context of systematic literature review
- Ability to distinguish between various methods of advanced exploratory statistical analysis
- Acquaintance of (statistical) software that can be used to perform a meta-analysis
- Knowledge and understanding of the methods for systematic reviews of economic evaluations
- Knowledge and understanding of the infrastructure for health care reviewing and the role of the Cochrane Collaboration
- Knowledge and understanding of guidelines for review protocol writing of systematic reviews
- Knowledge and understanding of accepted standards and guidelines for the publication of systematic literature reviews
- Knowledge and understanding of systems for grading the quality of evidence from original studies and systematic reviews
- Knowledge and understanding of the possibilities and limitations of extrapolation of the results of systematic reviews to clinical practice: clinical guidelines and individual patient care

EPI4928
Period 4
4 Feb 2019
5 Apr 2019
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- A. Wesselius

Teaching methods:
Assignment(s), Lecture(s), Work in subgroups, Paper(s), Presentations, Research, Skills, Training(s)
Assessment methods:
Final paper, Presentation
Fac. Health, Medicine and Life Sciences

Ethics of Health Care Research
Full course description

This module provides both a basic introduction into ethical aspects of healthcare research as a deepening of some specific ethical issues in conducting healthcare research.

Basic questions which will be dealt with are: What is the historical background of the development of research ethics? Which ethical problems are related to health research as compared to healthcare? How can researchers deal with these problems? How can researchers identify and deal with potential tensions between ethical requirements and methodological restraints? Which is the role of the Research Ethics Committee (REC)?

Specific ethical issues in healthcare research which will be explored are a.o.: What is the value of informed consent and what are possible exceptions? When and why is it justified to use deception in research? What about involving vulnerable people – children, mentally handicapped, prisoners, etc. – into healthcare research? What ethical issues are raised by biobanks? What does research integrity require from health researchers?

In a training session the writing of a participant information leaflet will be trained, because this a key-document to enhance or safeguard informed consent by potential research participants.

Course objectives

Knowledge and insight

- Knowledge and insight with regard to the historical background of (research) ethics
- Knowledge and insight with regard to central concepts in research ethics (respect for autonomy, risks, burdens and potential benefits of the research)
- Knowledge and insight with regard to specific ethical issues (vulnerable participants, biobanks, deception, design-related) in healthcare research and how to behave ethically responsible regarding these issues.
- Knowledge and insight with regard to the theory and practice of ethical reviewing of research protocols

Applying knowledge and understanding

- Ability to identify ethical issues when designing healthcare research
- Ability to write Participant Information Leaflet such as to enhance and safeguard informed consent
- Ability to identify and discuss ethically salient arguments

Making judgements

- Ability to develop a balanced view on basic ethical problems in research with human beings.

Communication

- Ability to communicate arguments and conclusions to colleagues in the tutor group.
- Ability to describe complex scientific research in a way comprehensible for laypeople participants

Learning skills
Research Master in Health Sciences

- Study and understand conceptual aspects of research ethics.
- Ability to discuss ethical issues with fellow-students

**Recommended reading**

Literature will be announced in the course book, covering historical, judicial and ethical sources.

RHS4023
Period 5
8 Apr 2019
7 Jun 2019
[Print course description](#)
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- [D. Horstkötter](#)

Teaching methods:
Assignment(s), Lecture(s), Work in subgroups, Presentations, Skills
Assessment methods:
Assignment, Attendance, Written exam
Keywords:
ethics, informed consent, vulnerable populations, biobanks, ethical committee, ParticipantInformationLeaflet
Fac. Health, Medicine and Life Sciences

**Modelling in Health Technology Assessment**

RHS4024
Period 5
8 Apr 2019
7 Jun 2019
[Print course description](#)
ECTS credits:
6.0
Instruction language:
English
Coordinators:

- [M.A. Joore](#)
- [C.D. Dirksen](#)

Second year courses

**Research Master Health Sciences Year 2**

Fac. Health, Medicine and Life Sciences
**Electives**

**Full course description**

Students of the Research Master of Health Sciences (HSRM) have to spend a considerable part of the second year of the master’s programme on topics of their choice. Educational modules (12 ECTS in total) have to be followed as electives. HSRM students that want to apply for a registration as Epidemiologist A, should consider to follow courses EPI4925 and EPI4926 (Master of Epidemiology). Electives should be at a Master level, should not be a duplicate of one of the courses in year 1 of the Master, and should be connected to the topic of the placement/thesis in year 2. The elective courses have to be assessed with an individual exam. The chosen electives have to be discussed with the thesis supervisor. For the electives students can choose to follow courses at Maastricht University, other Dutch universities or foreign universities. The electives can be planned at any moment in Year 2 of the master. Please note that tuition fees may be charged when courses are followed outside the Netherlands.

RHS0000
Year 1 Sep 2018 31 Aug 2019
Print course description
ECTS credits: 0.0
Instruction language: English
Coordinator:
- L.J. Schouten

Assessment methods:
Written exam
Fac. Health, Medicine and Life Sciences

**Acquiring Advanced Professional Skills (part2)**

**Full course description**

The course Acquiring Advanced Professional Skills consists of several subparts: (1) Writing the research protocol for the placement in year 2 (making use of the lectures and skills training sessions of the course Writing a research protocol (EPI4927)) (2) Writing scientific English (3) Development and evaluation of a portfolio (including 360 degree feedback, development of a personal development plan, reflection on professional behaviour, lectures on research integrity) (4) Journal club (5) Orientation of the research performed in the field of Health Sciences

**Course objectives**

Knowledge and understanding: - Students learn about the contents of the various elements of a research proposal - Students learn about various research and funding agencies, their strategies and procedures, their focus, their rules. Applying knowledge and understanding: - Student shows a
Research Master in Health Sciences

willingness to learn from evaluations by changing his or her behaviour, position or methods. - Students can apply the gained skills in a future research environment. Skills for further teaching - Student is able to ask for, receive and use in feedback a constructive attitude. - Students can resent their research project for an audience of teachers and fellow-students. - Students learn how to write a research protocol Communication - Student can show that he or she critically evaluates his or her own behavior, viewpoints and methods and is open to evaluation by others. - Student acts and complies with existing academic values, principles and rules to the best of one’s knowledge. Making judgements: - Students have the ability to review and assess the quality of existing research protocols. Students learn how to write and submit a research proposal in the wide field of health sciences research.

RHS5020
Year
1 Sep 2018
5 Jul 2019
Print course description
ECTS credits: 6.0
Instruction language: English
Coordinator: C.J.A.W. van Gool - de Vrede

Teaching methods:
Assignment(s), Lecture(s), Work in subgroups, Paper(s), PBL, Presentations, Research, Training(s), Working visit(s)

Assessment methods:
Oral exam, Participation, Portfolio

Fac. Health, Medicine and Life Sciences

Master Research and Thesis

Full course description

The placement period is the ultimate chance for a student to apply the knowledge he/she has gained in the previous year, to develop their competencies as a researcher and to be able to make a start on their scientific CV.

Course objectives

Knowledge and understanding - Knowledge of the field of their topic in research. Applying knowledge and understanding - Applying the knowledge of the theory practised in the first year. Ability to use prevailing advanced research methods and techniques within the context of their orientation. Ability to work with colleagues in a research team. Making judgments - Awareness of one’s limitations and ability to involve others when needed (in a timely fashion) when research or related activities requires additional insights, expertise or guidance. - Awareness of the ethical aspects of research with human and animal participants, as well as being able to implement good clinical practice guidelines. - Awareness of the consequences of one’s own professional behaviour - Ability and preparedness to change one’s view / behaviour if required. Communication - Ability to
Research Master in Health Sciences

report and present findings in English to the scientific community, both written and verbal. Learning skills - Ability to plan, develop and work out research projects.

RHS5021
Year
1 Sep 2018
31 Aug 2019
Print course description
ECTS credits:
42.0
Instruction language:
English
Coordinator:

- C.J.A.W. van Gool - de Vrede

Teaching methods:
Assignment(s)
Assessment methods:
Assignment, Attendance, Final paper, Observation, Participation, Presentation