

Course catalogue, spring semester 2024

## search results faculty/field "Faculty of Health Sciences and Medicine", Study level "Bachelor, Master", language "Englisch", semester "FS24"

### courses

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| FS241012 | VL    | Beeler / Havranek / Hug           | <a href="#">Analysis of routinely collected healthcare data (ARCHD)</a>                                   | we. We, 09:15 - 12.00<br>we. Th, 16:15 - 20.00 | div.  | 3    |
| FS241016 | VLUEB | Boes                              | <a href="#">Economic Evaluation in Health Care</a>  | we. Tu, 09:15 - 12.00                          | div.  | 4    |
| FS241011 | VLUEB | Boes / Ackermann / Bardy          | <a href="#">Advanced Quantitative Methods (ARM)</a>   | we. Tu, 12:30 - 14.00<br>we. We, 14:15 - 16.00 | div.  | 5    |
| FS241037 | VL    | Brandt; Farnham; Ziegler          | <a href="#">Public Health</a>   | we. Mo, 08:30 - 12.00                          | div.  | 5    |
| FS241032 | VL    | Brunkert                          | <a href="#">Interprofessional and Interdisciplinary Collaboration</a>                                     | we. Th, 14:15 - 16.00<br>we. Th, 14:15 - 18.00 | div.  | 7    |
| FS241624 | MKOL  | Colledge                          | <a href="#">Master Colloquium Health Sciences II</a>  |  | 3.B47 | 8    |
| FS241019 | VL    | Colledge                          | <a href="#">Exercise and Sport</a>  | we. Mo, 14:15 - 16.00                          | 3.A05 | 9    |
| FS241035 | MSE   | Dawson-Townsend                   | <a href="#">Project Management in Health Sciences (APS)</a>   |  | div.  | 10   |
| FS241030 | MSE   | Dawson-Townsend                   | <a href="#">Health Sciences in Practice (APS)</a>   | we. Th, 12:30 - 14.00                          | div.  | 11   |
| FS241034 | VLS   | Dawson-Townsend                   | <a href="#">Leadership &amp; Governance (APS)</a>   | we. Mo, 10:15 - 12.00                          | div.  | 12   |
| FS241446 | VL    | De Clercq                         | <a href="#">Science of Happiness</a>  |  | 4.B55 | 12   |
| FS241424 | MSE   | Gemperli                          | <a href="#">Clinical Quality Indicators</a>   | we. Th, 08:15 - 10.00                          | div.  | 15   |
| FS241039 | VL    | Grübner                           | <a href="#">Quantitative Methods</a>  | we. Tu, 08:15 - 12.00                          | div.  | 16   |
| FS241043 | VLUEB | Kauer                             | <a href="#">Statistical Basics &amp; Data Visualisation with R</a>  | we. Th, 09:15 - 12.00                          | div.  | 17   |
| FS241044 | VL    | Mantwill                          | <a href="#">Survey Methodology (ARM)</a>  | we. Tu, 16:15 - 18.00                          | HS 2  | 18   |
| FS241026 | MSE   | Michel / Ospelt / Ilic / Vokinger | <a href="#">Health Behavior Theories and Interventions</a>  | we. We, 08:15 - 10.00                          | div.  | 19   |
| FS241423 | VL    | Ort                               | <a href="#">Empowering Health Communication: Addressing Vulnerable Target Groups and Sensitive Topics</a> | we. We, 16:15 - 18.00                          | 3.B57 | 20   |
| FS241041 | VLUEB | Pacheco Barzallo                  | <a href="#">Social Impact of Health</a>   | we. Tu, 14:15 - 16.00                          | div.  | 21   |
| FS241015 | VL    | Raab / Beynon                     | <a href="#">Digital Health and Information Systems</a>  | we. We, 12:30 - 14.00                          | 3.A05 | 22   |
| FS241042 | MSE   | Rubinelli                         | <a href="#">Social Marketing and Health Campaigns</a>   | we. Th, 10:15 - 12.00                          | 4.B54 | 23   |
| FS241027 | MSE   | Rubinelli                         | <a href="#">Health Communication</a>  | we. We, 10:15 - 12.00                          | div.  | 24   |
| FS241031 | VLUEB | Sabariego Tomas                   | <a href="#">Healthy Ageing and Person-Centered Care</a>   | we. Th, 14:15 - 16.00                          | div.  | 25   |
| FS241623 | VL    | Seijas Bermudez / Perret          | <a href="#">Introduction to Clinical Rehabilitation Research</a>  | we. Tu, 14:15 - 16.00                          | div.  | 26   |
| FS241046 | MSE   | Stoyanov                          | <a href="#">Translational Medicine and Implementation Research</a>  |  | div.  | 26   |
| FS241029 | MSE   | Strobl                            | <a href="#">Health Economics</a>  | we. We, 12:30 - 14.00                          | div.  | 28   |
| FS241025 | MSE   | Weisstanner                       | <a href="#">Health and Social Policy</a>  | we. Mo, 12:30 - 14.00<br>we. Mo, 10:15 - 12.00 | div.  | 29   |

|                     |   |                       |      |    |
|---------------------|---|-----------------------|------|----|
| FS241404 VLUEB Zito | <a href="#">Basics of Neuroscience: From Brain to Cognition</a> | we. Mo, 08:15 - 10.00 | div. | 30 |
|---------------------|---|-----------------------|------|----|

## Introduction to Machine Learning for Health Science

|                            |  |
|----------------------------|--|
| <b>Lecturer</b>            | Ass.-Prof. Christian Frederik Baumgartner  |
| <b>Type of course</b>      | Lecture  |
| <b>Code</b>                | FS241638   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Master   |
| <b>Date</b>                | Mo, 26.02.2024, 08:15 - 10:00, 3.B57<br>Mo, 26.02.2024, 14:15 - 16:00, 3.B57<br>Mo, 04.03.2024, 08:15 - 10:00, 3.B57<br>Mo, 11.03.2024, 08:15 - 10:00, 3.B57<br>Mo, 18.03.2024, 08:15 - 10:00, 3.B57<br>Mo, 25.03.2024, 08:15 - 10:00, 3.B57<br>Mo, 08.04.2024, 08:15 - 10:00, 3.B57<br>Mo, 15.04.2024, 08:15 - 10:00, 3.B57<br>Mo, 22.04.2024, 08:15 - 10:00, 3.B57<br>Mo, 29.04.2024, 08:15 - 10:00, 3.B57<br>Mo, 06.05.2024, 08:15 - 10:00, 3.B57<br>Mo, 13.05.2024, 08:15 - 10:00, 3.B57<br>Mo, 27.05.2024, 08:15 - 10:00, 3.B57   |
| <b>Duration</b>            | 2 hours per week per semester  |
| <b>Course content</b>      | <p>Machine learning (ML) research is moving at a very rapid pace. Many of the recent developments in the automated analysis of images, text, as well as other data modalities has the potential to substantially reform healthcare. In this environment independently reading academic research papers, as well as a basic understanding of modern ML techniques are crucial.</p> <p>In this seminar, students will learn to read, understand, and present research paper on the topic of ML for healthcare.</p> <p>Each two hour session will see the presentation of some background by the instructor, as well as a student presentation on a applied ML for healthcare research paper, followed by a group discussion.</p> <p>Throughout, the semester we will go from simple applications of regression models, to more advanced techniques based on neural networks.</p> <p>Using the research papers as a red thread, we will see different medical data types (tabular data, text data, image data, time-series data), different modern ML tools (e.g. CNNs, Transformers, CLIP models) as well as different application areas of ML for health (data generation, risk stratification, decision support, workflow support, medical discovery).</p> |
| <b>Learning objectives</b> | After completing this seminar the students will... - be able to independently read, present and critically discuss academic research papers on machine learning for healthcare. - understand the basics of modern machine learning techniques and how they can be applied to healthcare problems. - develop an understanding of some clinical application areas where machine learning is likely to make an impact in the coming years. - be ready to dive deeper in one of the discussed machine learning techniques for example with a hands-on research project.  |
| <b>Prerequisites</b>       | Basic knowledge in probability theory and linear algebra is recommended as a prerequisite for this course.   |
| <b>Language</b>            | English  |
| <b>Limitation</b>          | Important: The course is limited to 11 participants. The limit is administered via MOODLE according to chronological order and registration. From 5 February 2024, 00:00, it will be possible to register via MOODLE. As soon as 11 participants are enrolled, the registration window will be closed automatically. If you wish to be put on the waiting list, then please send an email to: masterhealth@unilu.ch  |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=735">https://elearning.hsm-unilu.ch/course/view.php?id=735</a>  |
| <b>Exam</b>                | The final grade consists of a score for the presentation (70%), the participation as discussion leader (20%), as well as the general participation throughout the course (10%).  |
| <b>Type of exam</b>        | The final grade consists of a score for the presentation (70%), the participation as discussion leader (20%), as well as the general participation throughout the course (10%). / 3 Credits  |
| <b>Note</b>                | Teaching methods: Most sessions consist of a presentation by the instructor, as well as a student presentation, followed by a joint group discussion. Each student will present one research paper throughout the course. Moreover, each student will be assigned as discussion leader for two additional research papers. The responsibility of the discussion leader is to understand the respective papers in detail and come up with critical and engaging discussion topics. Presence is required for at least 11 out of the 13 sessions. The seminar is limited to 11 participants.  |
| <b>Auditors</b>            | No   |
| <b>Material</b>            | The presentation slides of the instructor as well as the individual student presentations will be made available to all students.  |
| <b>Literature</b>          | The research papers will be made available to the students ahead of the course.  |

**Analysis of routinely collected healthcare data (ARCHD)**

|                            |  |
|----------------------------|--|
| <b>Lecturer</b>            | Lecturer and course responsible: PD Dr. med. Patrick Beeler; lecturer and co-examiner: Dr. med. Dr. sc. nat. Michael Havranek; co-examiner: Prof. Dr. med. Balthasar Hug   |
| <b>Type of course</b>      | Lecture  |
| <b>Code</b>                | FS241012   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Master   |
| <b>Date</b>                | We, 21.02.2024, 09:15 - 12:00, 4.B55<br>We, 28.02.2024, 09:15 - 12:00, 4.B55<br>We, 06.03.2024, 09:15 - 12:00, 4.B55<br>We, 13.03.2024, 09:15 - 12:00, 4.B55<br>We, 20.03.2024, 09:15 - 12:00, 4.B55<br>Fr, 22.03.2024, 16:15 - 19:00, 4.B54<br>We, 27.03.2024, 09:15 - 12:00, 4.B55<br>We, 10.04.2024, 09:15 - 12:00, 4.B55<br>We, 17.04.2024, 09:15 - 12:00, 4.B55<br>We, 24.04.2024, 09:15 - 12:00, 4.B55<br>Th, 25.04.2024, 16:15 - 20:00, 4.B54<br>Th, 02.05.2024, 16:15 - 20:00, 4.B54<br>Th, 16.05.2024, 16:15 - 20:00, 4.B54<br>Th, 23.05.2024, 16:15 - 20:00, 4.B54<br>Fr, 31.05.2024, 16:15 - 19:00, 4.B54   |
| <b>Duration</b>            | 4 hours per week per semester  |
| <b>Course content</b>      | <p>In healthcare, more and more data are routinely collected and stored, driven by digitalization. Such data are called real-world data which the U.S. Food and Drug Administration (FDA) defines as "[...] data relating to patient health status and/or the delivery of health care routinely collected from a variety of sources". In the research context, real-world evidence results from the analysis of real-world data.</p> <p>Electronic health records constitute an important real-world data source that collects data during routine clinical practice for patient management and documentation purposes. Electronic health record data can be used to address novel research questions with minimal risks for patients. According to the "Framework for FDA's Real-World Evidence Program", real-world evidence may help expand indications for drugs only approved for specific conditions.</p> <p>Curiosity is an asset in the seminar Analysis of routinely collected healthcare data. The students will get the opportunity to exploratively work on anonymized but real patient data routinely collected in intensive care units (the MIMIC patient datasets). The students will get to know scientific articles based on MIMIC data, will practice the handling of large patient datasets, will learn how to process and analyze data and how to apply appropriate statistical methods and machine learning for research purposes.</p> <p>Over the course of this seminar, the students will generate their own real-world evidence in the form of a capstone project. In the process, they will be guided in posing a research question, selecting suitable statistical methods, preprocessing the data, performing their analyses, and interpreting their findings. Thus, this capstone project bridges the gap between course work and real-world application. This seminar will optimally prepare students who are planning to do a quantitative Master's thesis using real-world data.</p> |
| <b>E-learning</b>          | To become a credentialed user by following the instructions on <a href="https://mimic.mit.edu/docs/gettingstarted/">https://mimic.mit.edu/docs/gettingstarted/</a> is a prerequisite. This prerequisite includes an e-learning training course before a student gets access to the MIMIC patient datasets.   |
| <b>Learning objectives</b> | In this seminar, the students will work on their own devices (tutorials, exercises, MIMIC patient data analysis).<br>After having completed this seminar, you will - be able to deal with large datasets of real patient data routinely collected in electronic health records - know how to explore, understand and describe such real-world data, be aware of the advantages and disadvantages of real-world data - know what techniques are used to process, transform, aggregate and present patient data - be able to apply the most important statistical methods to generate real-world evidence - and you will have understood the basic principles and methods of machine learning and are able to apply them   |
| <b>Prerequisites</b>       | • Become a credentialed user by following the instructions on <a href="https://mimic.mit.edu/docs/gettingstarted/">https://mimic.mit.edu/docs/gettingstarted/</a> before the start of the seminar. • It's a hands-on seminar: Bring your own device. Recommended courses: • Data Modeling and Database Systems Dr. Ivan Giangreco • Advanced Quantitative Methods Prof. Stefan Boes  |
| <b>Language</b>            | English  |
| <b>Limitation</b>          | This a core course in the major "Health Data Science"  |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=697">https://elearning.hsm-unilu.ch/course/view.php?id=697</a>  |
| <b>Exam</b>                | First oral presentation with slides of a scientific article on March 22 during seminar (not graded) 2a) Written abstract on student's own project developed over the course of the seminar, submission before oral presentation on May 31 (not graded*) 2b) Submission of code: R or Python code and all or the most significant SQL statements used (not graded*) 2c) Second oral presentation with slides of student's own project developed over the course of the seminar, on May 31 during seminar (mean grade of the three examiners' grades; *abstract and or code may be considered in cases of disagreement between examiners)  |
| <b>Type of exam</b>        | First oral presentation with slides, Written abstract, Second oral presentation with slides / 6 Credits  |
| <b>Note</b>                | Teaching methods: Longitudinal seminar with blended learning, including lectures, tutorials, hands-on exercises and class discussions as well as a supervised capstone project during the second part of the course.   |
| <b>Auditors</b>            | Yes  |
| <b>Contact</b>             | Lecturer and course responsible: PD Dr. med. Patrick Beeler; Lecturer and co-examiner: Dr. med. Dr. sc. nat. Michael Havranek; Co-examiner: Prof. Dr. med. Balthasar Hug <a href="mailto:patrick.beeler@unilu.ch">patrick.beeler@unilu.ch</a> / <a href="mailto:michael.havranek@unilu.ch">michael.havranek@unilu.ch</a> / <a href="mailto:balthasar.hug@unilu.ch">balthasar.hug@unilu.ch</a>  |
| <b>Material</b>            | The teaching material is based on slides, hands-on exercises in class, selected scientific articles, and online resources. Offline material will be provided via moodle.   |
| <b>Literature</b>          | While slides and selected scientific articles will be presented and discussed, in this seminar it will be more important for the students<br>- to learn and practice working on data,<br>- to be curious and to explore data, techniques and methods,<br>- to get to know essential online resources, and<br>- to learn resolving issues/overcoming obstacles with the help of online research.  |

**Economic Evaluation in Health Care**

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|----------------------------|--|
| <b>Lecturer</b>            | Prof. Dr. Stefan Boes  |
| <b>Type of course</b>      | Lecture/Exercise   |
| <b>Code</b>                | FS241016   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Master   |
| <b>Date</b>                | Tu, 20.02.2024, 09:15 - 12:00, 4.B47<br>Tu, 27.02.2024, 09:15 - 12:00, 4.B47<br>Tu, 05.03.2024, 09:15 - 12:00, 4.B47<br>Tu, 12.03.2024, 09:15 - 12:00, 4.B47<br>Tu, 19.03.2024, 09:15 - 12:00, 4.B47<br>Tu, 26.03.2024, 09:15 - 12:00, 4.B47<br>Tu, 09.04.2024, 09:15 - 12:00, 4.B47<br>Tu, 16.04.2024, 09:15 - 12:00, 4.B47<br>Tu, 23.04.2024, 09:15 - 12:00, 4.B47<br>Tu, 30.04.2024, 09:15 - 12:00, 4.B47<br>Tu, 07.05.2024, 09:15 - 12:00, 4.B47<br>Tu, 14.05.2024, 09:15 - 12:00, 4.B47<br>Tu, 21.05.2024, 09:15 - 12:00, 4.B47<br>Tu, 28.05.2024, 09:15 - 12:00, 4.B47<br>Mo, 10.06.2024, 08:15 - 09:45, HS 10 (Examination)                           |
| <b>Duration</b>            | 4 hours per week per semester  |
| <b>Frequency</b>           | weekly   |
| <b>Course content</b>      | The course provides an introduction to the principles of economic evaluation. Building on the theoretical foundations of cost-benefit, cost-utility, and cost-effectiveness analyses, the course will cover topics such as the measurement and valuation of health outcomes and costs, decision-analytic modeling, with a focus on decision trees and Markov models, uncertainty and sensitivity analysis, and using real-world evidence to inform decision-making. Time will be devoted to practicing and discussing economic evaluations in the domain of health and health care and the use of economic evaluation results in health policy and practice. |
| <b>E-learning</b>          | Teaching material is provided via the e-learning platform moodle.  |
| <b>Learning objectives</b> | The course has three main objectives: (i) to develop a critical understanding of the main principles and methods of health economic evaluations, (ii) to describe and compare different approaches of health economic modeling and how they can be used to inform decision-making, and (iii) to learn how to design, analyze, and interpret economic evaluation research, drawing on recent examples from the literature.  |
| <b>Prerequisites</b>       | Overall grade of 4.0 or better.  |
| <b>Language</b>            | English  |
| <b>Limitation</b>          | priority MSc Health Sciences students Mandatory for all students in the Major "Health Economics and Policy".   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=599">https://elearning.hsm-unilu.ch/course/view.php?id=599</a>  |
| <b>Exam</b>                | Final written examination and homework assignments. Homework assignments, will be distributed in class.  |
| <b>Type of exam</b>        | Final written examination and homework assignments / 6 Credits   |
| <b>Note</b>                | Teaching method(s): Longitudinal course with blended learning, including lectures, tutorials, exercises and class/online discussions.  |
| <b>Auditors</b>            | Yes  |
| <b>Contact</b>             | stefan.boes@unilu.ch   |
| <b>Material</b>            | Teaching material is based on slides, exercises, and selected book chapters.   |
| <b>Literature</b>          | Main readings for this course are<br><br>- Drummond MF, O'Brien B, Stoddart GL, Torrance GW (2015). Methods for the Economic Evaluation of Health Care Programmes. 4th edition. Oxford UP.<br><br>- Briggs A, Sculpher M, Claxton K (2006). Decision Modelling for Health Economic Evaluation. Oxford UP.<br><br>- Gray AM, Clarke PM, Wolstenholme JL, Wordsworth S (2010). Applied Methods of Cost-effectiveness Analysis in Health Care. Oxford UP.<br><br>All books are available in the library. Additional readings will be distributed via the e-learning platform moodle.  |

**Advanced Quantitative Methods (ARM)**

|                            |   |
|----------------------------|---|
| <b>Lecturer</b>            | Prof. Dr. Stefan Boes Noel Ackermann, MA Dr. sc. Tess Bardy   |
| <b>Type of course</b>      | Lecture/Exercise  |
| <b>Code</b>                | FS241011  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Master  |
| <b>Date</b>                | Tu, 20.02.2024, 12:30 - 14:00, 3.A05<br>We, 21.02.2024, 14:15 - 16:00, HS 6<br>Tu, 27.02.2024, 12:30 - 14:00, 3.A05<br>We, 28.02.2024, 14:15 - 16:00, HS 6<br>Tu, 05.03.2024, 12:30 - 14:00, 3.A05<br>We, 06.03.2024, 14:15 - 16:00, HS 6<br>Tu, 12.03.2024, 12:30 - 14:00, 3.A05<br>We, 13.03.2024, 14:15 - 16:00, HS 6<br>Tu, 19.03.2024, 12:30 - 14:00, 3.A05<br>We, 20.03.2024, 14:15 - 16:00, HS 6<br>Tu, 26.03.2024, 12:30 - 14:00, 3.A05<br>We, 27.03.2024, 14:15 - 16:00, HS 6<br>Tu, 09.04.2024, 12:30 - 14:00, 3.A05<br>We, 10.04.2024, 14:15 - 16:00, HS 6<br>Tu, 16.04.2024, 12:30 - 14:00, 3.A05<br>We, 17.04.2024, 14:15 - 16:00, HS 6<br>Tu, 23.04.2024, 12:30 - 14:00, 3.A05<br>We, 24.04.2024, 14:15 - 16:00, HS 6<br>Tu, 30.04.2024, 12:30 - 14:00, 3.A05<br>We, 01.05.2024, 14:15 - 16:00, HS 6<br>Tu, 07.05.2024, 12:30 - 14:00, 3.A05<br>We, 08.05.2024, 14:15 - 16:00, HS 6<br>Tu, 14.05.2024, 12:30 - 14:00, 3.A05<br>We, 15.05.2024, 14:15 - 16:00, HS 6<br>Tu, 21.05.2024, 12:30 - 14:00, 3.A05<br>We, 22.05.2024, 14:15 - 16:00, HS 6<br>Tu, 28.05.2024, 12:30 - 14:00, 3.A05<br>We, 29.05.2024, 14:15 - 16:00, HS 6<br>We, 12.06.2024, 08:15 - 09:45, HS 9 (Examination) |
| <b>Duration</b>            | 4 hours per week per semester   |
| <b>Course content</b>      | Building on the fundamentals of probability and inferential statistics, the course introduces key methods used in modern quantitative research. Students learn how to carry out an empirical analysis, going beyond simple descriptive statistics and hypothesis testing. Topics include linear regression, the analysis of panel data, discrete dependent variables, and causal inference. Numerous examples and computer tutorials offer hands-on experiences in utilizing the methods.<br>The distinctive feature of the course is a combination of traditional lecture style teaching methods, tutorials, and online activities, including video lectures, online tutorials, and the interactive analysis of a real-world dataset.  |
| <b>Learning objectives</b> | The objectives of this course are: (i) to deepen your understanding of inferential statistics (ii) to learn the basic methodology of modern quantitative research (iii) to acquire the skills to plan and execute your own empirical project The course focuses on applied quantitative tools, i.e., the use of real data (drawn from the Swiss Household Panel) and the application of statistical software (Stata) to practice the discussed methods will be an integral part of the learning experience.   |
| <b>Language</b>            | English   |
| <b>Limitation</b>          | This course is a "Advanced Research Methods" course   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=690">https://elearning.hsm-unilu.ch/course/view.php?id=690</a>   |
| <b>Exam</b>                | Grading will be based on a final written exam (70%) and an individualized homework assignment (30%). The homework assignment consists of three tasks to be solved based on the computer labs. Details on the tasks will be communicated via the e-learning platform. An overall grade of 4.0, or higher, is required to successfully complete the course. In case of a grade lower than 4.0, repetition during the next examination period consists of a written exam only.   |
| <b>Type of exam</b>        | Written examination, homework assignment / 6 Credits  |
| <b>Note</b>                | Teaching methods: Blended learning with lectures, tutorials, and class/online activities.   |
| <b>Auditors</b>            | Yes   |
| <b>Contact</b>             | stefan.boes@unilu.ch / noel.ackermann@unilu.ch / tess.bardy@unilu.ch  |
| <b>Material</b>            | The teaching material is based on slides, videos, online tutorials, selected book chapters and specific training datasets.  |
| <b>Literature</b>          | References and readings will be provided on the e-learning platform moodle.   |

**Public Health**

|                       |   |
|-----------------------|---|
| <b>Lecturer</b>       | Sarah Ziegler Andrea Farnham, PhD Sophie Karoline Brandt, MSc   |
| <b>Type of course</b> | Lecture   |
| <b>Code</b>           | FS241037  |
| <b>Semester</b>       | Spring semester 2024  |
| <b>Department</b>     | Health Sciences   |
| <b>Study level</b>    | Bachelor  |
| <b>Date</b>           | Mo, 19.02.2024, 08:30 - 12:00, HS 7<br>Mo, 26.02.2024, 08:30 - 12:00, HS 7<br>Mo, 04.03.2024, 08:30 - 12:00, HS 7<br>Mo, 11.03.2024, 08:30 - 12:00, HS 7<br>Mo, 18.03.2024, 08:30 - 12:00, HS 7<br>Mo, 25.03.2024, 08:30 - 12:00, HS 7<br>Mo, 08.04.2024, 08:30 - 12:00, HS 7<br>Mo, 15.04.2024, 08:30 - 12:00, HS 7<br>Mo, 22.04.2024, 08:30 - 12:00, HS 7<br>Mo, 29.04.2024, 08:30 - 12:00, HS 7<br>Mo, 06.05.2024, 08:30 - 12:00, HS 7 |

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|                            | Mo, 13.05.2024, 08:30 - 12:00, HS 7<br>Mo, 27.05.2024, 08:30 - 12:00, HS 7<br>Tu, 18.06.2024, 08:15 - 10:15, HS 1 (Examination)  |
| <i>Duration</i>            | 4 hours per week per semester  |
| <i>Course content</i>      | <p><b>Block One</b></p> <p>Introduction: what is public health?</p> <ul style="list-style-type: none"> <li>• Historical development of public health and major public health areas of competency</li> <li>• Exploring global health and inequalities through the Global Burden of Disease (GBD) Study</li> <li>• Health and disease determinants: disease prevention, environmental health, health inequalities and social determinants of health, health systems, health promotion</li> </ul> <p>Introduction: Public health in Switzerland</p> <ul style="list-style-type: none"> <li>• Major areas and stakeholders</li> <li>• The Swiss healthcare system</li> <li>• Public health in policy</li> </ul> <p><b>Block Two</b></p> <p>Public health methodology</p> <ul style="list-style-type: none"> <li>• Fundamentals of epidemiology</li> <li>• Study types (randomized control trials, cohort studies, case-control studies, cross-sectional studies)</li> <li>• Public health surveillance and ecological studies</li> <li>• Social science and qualitative research</li> <li>• Causation and causal inference</li> <li>• Fundamentals of statistical methods</li> <li>• Mathematical models of disease transmission</li> </ul> <p>Methods: National health strategies</p> <ul style="list-style-type: none"> <li>• Public health action cycle: Problem - strategy - implementation - evaluation</li> <li>• Health impact model &amp; indicators</li> <li>• Example: Evaluation of national health strategy</li> </ul> <p><b>Block Three</b></p> <p>Special topics in public health</p> <ul style="list-style-type: none"> <li>• Communicable diseases</li> <li>• Non-communicable diseases (e.g. national health strategy NCD (MonAM data))</li> <li>• Community-based interventions and international impact evaluation</li> <li>• Maternal, child, and women's health</li> <li>• Public health over the lifespan</li> </ul> |
| <i>Tags</i>                | Gender/diversity   |
| <i>Learning objectives</i> | The objective of this course is to give an overview of the field of public health and enable students to apply their knowledge directly to designing and interpreting studies on population health. The first part of the course establishes a comprehensive understanding of the core competencies, concepts, and values of the field of public health and its major challenges. In addition, students gain an insight into the Swiss healthcare system, its structure and organization. The second part of the course introduces the fundamental methodologies of public health, including epidemiology, the different types of studies used to inform public health practice, and common quantitative and qualitative methods. The final part of the course provides applied case studies on real world research and interventions in public health practice.   |
| <i>Language</i>            | English  |
| <i>Registration</i>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=706">https://elearning.hsm-unilu.ch/course/view.php?id=706</a>  |
| <i>Exam</i>                | Written exam, Active participation and passing grade on final project.   |
| <i>Type of exam</i>        | Active participation and passing grade on final project. / 6 Credits   |
| <i>Note</i>                | Teaching methods/Indications: Lectures, stakeholder input talks, interactive group work, practical group exercises (mini-projects & case studies), short interactive digital quizzes and polls, class discussions.   |
| <i>Auditors</i>            | Yes  |
| <i>Contact</i>             | sophie.brandt@unilu.ch   |
| <i>Material</i>            | The textbook is Public Health Kompakt (4. Auflage) by Egger, Razum, and Rieder. De Gruyter, 2021. The textbook will be supplemented by topic specific readings uploaded online.  |
| <i>Literature</i>          | The textbook is Public Health Kompakt (4. Auflage) by Egger, Razum, and Rieder. De Gruyter, 2021. The textbook will be supplemented by topic specific readings uploaded online.  |

**Interprofessional and Interdisciplinary collaboration**

|                            |  |
|----------------------------|--|
| <b>Lecturer</b>            | Ass.-Prof. Thekla Brunkert   |
| <b>Type of course</b>      | Lecture  |
| <b>Code</b>                | FS241032   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Bachelor   |
| <b>Date</b>                | Th, 22.02.2024, 14:15 - 16:00, HS 7<br>Th, 29.02.2024, 14:15 - 16:00, HS 7<br>Th, 07.03.2024, 14:15 - 16:00, HS 7<br>Th, 14.03.2024, 14:15 - 16:00, HS 7<br>Th, 21.03.2024, 14:15 - 16:00, HS 7<br>Th, 28.03.2024, 14:15 - 16:00, HS 7<br>Th, 11.04.2024, 14:15 - 16:00, HS 7<br>Th, 18.04.2024, 14:15 - 16:00, HS 7<br>Th, 25.04.2024, 14:15 - 16:00, HS 7<br>Th, 02.05.2024, 14:15 - 18:00, HS 7<br>Th, 16.05.2024, 14:15 - 18:00, HS 7<br>Th, 23.05.2024, 14:15 - 18:00, HS 7   |
| <b>Further dates</b>       | The primary language of instruction for this course is English. However, select presentations will be conducted in German. Group presentations and the written reflection will need to be completed in English.  |
| <b>Duration</b>            | 2 hours per week per semester  |
| <b>Course content</b>      | a. Definitions, significance, and evidence of interprofessional education and collaboration (international and national perspectives)<br><br>b. Frameworks and interprofessional competencies<br><br>c. Roles, tasks, and competencies of various professional groups in healthcare (examples include medicine, nursing, physiotherapy, social work, and health sciences)<br><br>d. Political, legal, and financial aspects of interprofessional collaboration.<br><br>e. Research in interdisciplinary teams<br><br>f. Project examples from education and practice   |
| <b>Learning objectives</b> | a. Students can describe the key concepts and importance of interprofessional and interdisciplinary collaboration in healthcare, identifying common challenges faced in such collaborative environments. b. Students will be able to identify and list the various roles, tasks, and competencies of different professional groups in healthcare, such as medicine, nursing, physiotherapy, and social work, understanding how these contribute to patient care. c. Students will apply basic principles of interprofessional education and collaboration in case studies, demonstrating an initial understanding of how these concepts are implemented in real-world healthcare settings. |
| <b>Language</b>            | Bilingual - German / English   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=718">https://elearning.hsm-unilu.ch/course/view.php?id=718</a>  |
| <b>Exam</b>                | a. Individual/ Group presentation b. written reflection task   |
| <b>Type of exam</b>        | written reflection task / 3 Credits  |
| <b>Note</b>                | Teaching formats: a. Interactive lectures b. Flipped Classroom c. Group / Project work   |
| <b>Auditors</b>            | Yes  |
| <b>Literature</b>          | WHO Framework for Action on Interprofessional Education and Collaborative Practice (Link)<br><br>Federal Office of Public Health (FOPH) Support programme «Interprofessionality in healthcare 2017-2020» (Link)<br><br>FOPH Directory of Good Practice Models - Interprofessionalism (Link)<br><br>Plattform interprofessionality in primary care– quality criteria (Link)<br><br>Ulrich, G., Amstad, H., Glardon, O. & Kaap-Fröhlich, S. (2020). Careum Working Paper 9: «Interprofessionelle Ausbildung im Schweizer Gesundheitssystem: Situationsanalyse, Perspektiven und Roadmap». Zürich: Careum. (Link)<br><br>A complete list of teaching materials will be provided on Moodle.    |

**Master Colloquium Health Sciences II**

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|----------------------------|--|
| <i>Lecturer</i>            | Flora Colledge, PhD  |
| <i>Type of course</i>      | Master colloquium  |
| <i>Code</i>                | FS241624   |
| <i>Semester</i>            | Spring semester 2024   |
| <i>Department</i>          | Health Sciences  |
| <i>Study level</i>         | Master   |
| <i>Date</i>                | Fr, 15.03.2024, 12:30 - 15:00, 3.B47   |
| <i>Duration</i>            | 2 hours per week per semester  |
| <i>Frequency</i>           | block course   |
| <i>Course content</i>      | In the Master Colloquium, students have to present their master thesis projects. Each student will present once in fall and once in spring. Presentations in the fall semester (Colloquium I) focus on the background, objective and planned methods of the thesis. Presentations in the spring semester (Colloquium II) provide a brief summary of the results and tentative conclusions. After each presentation, there will be a short discussion, giving students the opportunity to comment and reflect on the presented topic. Students will learn how to review others' work and provide constructive feedback to the presenters. They will also learn how to write reviews of other's scientific work in a brief and constructive way. |
| <i>E-learning</i>          | All teaching material is provided via the e-learning platform Moodle.  |
| <i>Learning objectives</i> | The objectives of the colloquium are: i) to practice scientific presentation and discussion on a competitive academic level on different subjects in the health sciences, ii) to learn how to defend scientific research, and iii) practice giving verbal and written feedback related to scientific research.   |
| <i>Prerequisites</i>       | Presentation of project, active participation, completion of one-page summary reviews as assigned.   |
| <i>Language</i>            | English  |
| <i>Limitation</i>          | MSc Health Sciences students Mandatory for all students of the Master Health Sciences.   |
| <i>Registration</i>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=588">https://elearning.hsm-unilu.ch/course/view.php?id=588</a>  |
| <i>Exam</i>                | This is a pass/fail course. Each student is required to present his/her master thesis project once in the fall and once in the spring semester. Each student will also write two one-page reviews of the presentations of other students. Each student has to be present on all four course days (two days in fall and two days in spring semester).   |
| <i>Type of exam</i>        | Active Participation / 3 Credits   |
| <i>Note</i>                | Teaching method(s): Student presentations, discussion and feedback, writing brief reviews.   |
| <i>Auditors</i>            | No   |
| <i>Contact</i>             | katharina.rosler@unilu.ch / flora.colledge@unilu.ch / kathryn.dawson@unilu.ch  |
| <i>Material</i>            | All teaching material is provided via the e-learning platform Moodle.  |



**Exercise and Sport**

|                            |  |
|----------------------------|--|
| <b>Lecturer</b>            | Dr. Flora Colledge   |
| <b>Type of course</b>      | Lecture  |
| <b>Code</b>                | FS241019   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Bachelor   |
| <b>Date</b>                | Mo, 19.02.2024, 14:15 - 16:00, 3.A05<br>Mo, 26.02.2024, 14:15 - 16:00, 3.A05<br>Mo, 04.03.2024, 14:15 - 16:00, 3.A05<br>Mo, 11.03.2024, 14:15 - 16:00, 3.A05<br>Mo, 18.03.2024, 14:15 - 16:00, 3.A05<br>Mo, 25.03.2024, 14:15 - 16:00, 3.A05<br>Mo, 08.04.2024, 14:15 - 16:00, 3.A05<br>Mo, 15.04.2024, 14:15 - 16:00, 3.A05<br>Mo, 22.04.2024, 14:15 - 16:00, 3.A05<br>Mo, 29.04.2024, 14:15 - 16:00, 3.A05<br>Mo, 06.05.2024, 14:15 - 16:00, 3.A05<br>Mo, 13.05.2024, 14:15 - 16:00, 3.A05<br>Mo, 27.05.2024, 14:15 - 16:00, 3.A05   |
| <b>Duration</b>            | 2 hours per week per semester  |
| <b>Course content</b>      | <ul style="list-style-type: none"> <li>- Physical activity – types and indication</li> <li>- Physiological effects</li> <li>- Psychological and cognitive effects</li> <li>- Planning physical activity interventions</li> <li>- Physical activity in populations with health impairment</li> <li>- Sports medicine</li> <li>- Gender, sport and activity participation</li> </ul>   |
| <b>Learning objectives</b> | This course gives students detailed insight into the role that physical activity plays in the maintenance, promotion and optimization of human health. The primary focus will be on structured exercise and sports, and the effects of these activities on physical, psychological and cognitive functioning. Students will learn about the main parameters in the assessment of physical activity and its effects, and current evidence for the effectiveness of physical activity in the prevention of health problems. Interventions to promote physical activity will be given particular attention. Additionally, topics including sports medicine, gender and adapted physical activity will be addressed. Students are given the opportunity to select the topics which interest them, and focus on these in the preparation of their class assignments and final assessment. |
| <b>Language</b>            | English  |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=732">https://elearning.hsm-unilu.ch/course/view.php?id=732</a>  |
| <b>Exam</b>                | - Group-led discussion of a scientific paper ("Journal Club") - Final paper – option to choose between designing an intervention and a literature review on theme of own choosing  |
| <b>Type of exam</b>        | - Group-led discussion of a scientific paper ("Journal Club") / 3 Credits  |
| <b>Note</b>                | Teaching methods: - Lecture - Group presentations - Independent reading - Group discussion   |
| <b>Auditors</b>            | Yes  |
| <b>Contact</b>             | flora.colledge@unilu.ch  |
| <b>Material</b>            | - Articles and materials will be provided via Moodle   |

**Project Management in Health Sciences**

|                            |   |
|----------------------------|---|
| <b>Lecturer</b>            | Dr. sc. Kathryn Ann Dawson-Townsend   |
| <b>Type of course</b>      | Master seminar  |
| <b>Code</b>                | FS241035  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Master  |
| <b>Date</b>                | Fr, 01.03.2024, 12:30 - 16:00, 3.B58<br>Fr, 08.03.2024, 12:30 - 16:00, 3.B58<br>Fr, 22.03.2024, 12:30 - 16:00, 3.B58<br>Fr, 12.04.2024, 12:30 - 16:00, 3.B58<br>Fr, 19.04.2024, 12:30 - 16:00, HS 9<br>Fr, 17.05.2024, 12:30 - 16:00, 3.B58<br>Th, 20.06.2024, 08:15 - 09:45, HS 9 (Examination)  |
| <b>Duration</b>            | 2 hours per week per semester   |
| <b>Frequency</b>           | Block course  |
| <b>Course content</b>      | The project management canvas (Nieto-Rodriguez, 2021) with its nine dimensions will be introduced and discussed. Examples of successful and unsuccessful projects will be analyzed and discussed. A guest lecturer who leads projects in the field of healthcare will bring practical insights to the course. Barriers and facilitators to successfully managing one's own individual project will be covered, along with practical suggestions for overcoming barriers. Leadership skills that are associated with successful project implementation within organizations will be presented and discussed. |
| <b>E-learning</b>          | All teaching material (except books) is provided via the e-learning platform moodle.  |
| <b>Learning objectives</b> | This course introduces students to the discipline of project management and focuses in particular on the healthcare setting. Students will learn an implementation model: project management canvas (Nieto-Rodriguez, 2021) and apply this to a case study based in the healthcare field. Students will also learn how to apply these concepts to an individual project (such as their master project or a future scientific project), culminating in an individual project handbook. The class ends with a review of leadership skills needed to implement successful projects with others.                |
| <b>Language</b>            | English   |
| <b>Limitation</b>          | MSc Health Sciences students only This course is a Academic and Professional Skills (APS) course.   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=691">https://elearning.hsm-unilu.ch/course/view.php?id=691</a>   |
| <b>Exam</b>                | group presentation on case study (20%); a project handbook (20%); a final exam (60%)  |
| <b>Type of exam</b>        | Active participation and project handbook / 3 Credits   |
| <b>Note</b>                | Teaching methods: Blended learning with lectures, tutorials, and class discussions.   |
| <b>Auditors</b>            | No  |
| <b>Contact</b>             | kathryn.dawson@unilu.ch   |
| <b>Material</b>            | Nieto-Rodriguez, A. (2021). Harvard Business Review project management handbook: how to launch, lead, and sponsor successful projects. Harvard Business School Publishing Corporation. Additional materials will be provided via Moodle.  |

**Health Sciences in Practice (APS)**

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|----------------------------|---|
| <b>Lecturer</b>            | Dr. sc. Kathryn Ann Dawson-Townsend   |
| <b>Type of course</b>      | Master seminar  |
| <b>Code</b>                | FS241030  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Master  |
| <b>Date</b>                | Th, 22.02.2024, 12:30 - 14:00, 4.B55<br>Th, 29.02.2024, 12:30 - 14:00, 4.B55<br>Th, 07.03.2024, 12:30 - 14:00, 4.B55<br>Th, 14.03.2024, 12:30 - 14:00, 4.B55<br>Th, 21.03.2024, 12:30 - 14:00, 4.B55<br>Th, 28.03.2024, 12:30 - 14:00, 4.B55<br>Th, 11.04.2024, 12:30 - 14:00, 4.B55<br>Th, 18.04.2024, 12:30 - 14:00, 4.B55<br>Th, 25.04.2024, 12:30 - 14:00, 4.B55<br>Th, 02.05.2024, 12:30 - 14:00, 4.B55<br>Th, 16.05.2024, 12:30 - 14:00, 4.B55<br>Th, 23.05.2024, 12:30 - 14:00, 4.B55<br>Tu, 18.06.2024, 14:00 - 15:30, HS 9 (Examination)                           |
| <b>Duration</b>            | 2 hours per week per semester   |
| <b>Course content</b>      | Guest speakers will present information including but not limited to: their career path, their current position, their company/institution and industry, examples of how they practice health science in their role as well as career advice. Presentations will be followed by an active Q&A session.<br><br>Weekly lecture sessions also cover various management topics that will help students better evaluate their chosen target organizations and settings. These include but are not limited to: strategy and various strategic tools, entrepreneurship, marketing. |
| <b>E-learning</b>          | All learning materials are provided via the E-learning platform Moodle.   |
| <b>Learning objectives</b> | This course provides students with insights into the wide variety of potential career directions in the health sciences that they may pursue. Through their own research and engaging presentations by current practitioners in the field of health sciences, students will be prepared to conduct their own job searches in the future. The course requires students to conduct research on companies/institutions and their industries, which will help students prepare for interviews at these or similar firms.  |
| <b>Prerequisites</b>       | By the end of this course, students should be able: • Identify target firms and industries they would like to consider for their career • Prepare for interviews by researching target firms and their industries   |
| <b>Language</b>            | English   |
| <b>Limitation</b>          | Open for Health Sciences students This course is a "Academic and Professional Skills" course  |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=692">https://elearning.hsm-unilu.ch/course/view.php?id=692</a>   |
| <b>Exam</b>                | Students may choose which option they wish to complete and pass for earning 3 ECTS. Option A includes a dossier on two companies (60%), the final exam (30%), and active participation (10%). Option B includes a dossier on only one company, the final exam (counting for 60%) and active participation (10%). Further information will be found in the syllabus and will be discussed on the first day.  |
| <b>Type of exam</b>        | written exam / 3 Credits  |
| <b>Note</b>                | Teaching method(s): Interactive classes based on presentations from guest speakers who are currently working or studying in the field of health sciences. Speakers from the following industry branches will be invited: pharmaceutical and biotech firms, hospitals, governmental departments, academia, consulting, and other areas.  |
| <b>Auditors</b>            | No  |
| <b>Contact</b>             | kathryn.dawson@unilu.ch   |
| <b>Material</b>            | The teaching material is based on the information shared by the lecturer, guest speakers and the information students can find from other sources (online, others). Lecture slides and selected presentations will be posted to Moodle.   |

**Leadership & Governance (APS)**

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|----------------------------|---|
| <b>Lecturer</b>            | Dr. sc. Kathryn Ann Dawson-Townsend   |
| <b>Type of course</b>      | Lecture/Seminar   |
| <b>Code</b>                | FS241034  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Bachelor<br>Master  |
| <b>Date</b>                | Mo, 19.02.2024, 10:15 - 12:00, HS 8<br>Mo, 26.02.2024, 10:15 - 12:00, HS 8<br>Mo, 04.03.2024, 10:15 - 12:00, HS 8<br>Mo, 11.03.2024, 10:15 - 12:00, HS 8<br>Mo, 18.03.2024, 10:15 - 12:00, HS 8<br>Mo, 25.03.2024, 10:15 - 12:00, HS 8<br>Mo, 08.04.2024, 10:15 - 12:00, HS 8<br>Mo, 15.04.2024, 10:15 - 12:00, HS 8<br>Mo, 22.04.2024, 10:15 - 12:00, HS 8<br>Mo, 29.04.2024, 10:15 - 12:00, HS 8<br>Mo, 06.05.2024, 10:15 - 12:00, HS 8<br>Mo, 13.05.2024, 10:15 - 12:00, HS 8<br>Mo, 27.05.2024, 10:15 - 12:00, HS 8<br>Tu, 18.06.2024, 08:15 - 09:45, HS 10 (Examination)   |
| <b>Further dates</b>       | 1-2 Guest speakers with relevant experience   |
| <b>Duration</b>            | 2 hours per week per semester   |
| <b>Course content</b>      | Week 1: Introduction to the course<br>Week 2: Leadership Theories and Styles, Managing Change<br>Week 3: Individual and Organizational Learning, Attitudes & Satisfaction<br>Week 4: Individual and organizational values, Ethics & Motivation<br>Week 5: Emotion, Moods, Stress on the Job, Paradigms and Perceptions<br>Week 6: Decision-Making<br>Week 7: Group Behavior, Work Teams<br>Week 8: Developing Employees, Performance Management<br>Week 9: Communication, Organizational Culture<br>Week 10: Power, Politics & Influence and Conflict Management & Negotiation<br>Week 11: Governance<br>Week 12: Discuss leadership case, assigned article   |
| <b>Learning objectives</b> | Leaders in healthcare face environments that are volatile, uncertain and complex and they often interface with multiple stakeholders on a daily basis. The WHO has identified Leadership & Governance as one of the six building blocks in the WHO Health Systems Framework, which is focused on strengthening health systems. This course will help prepare students to work successfully in the field of healthcare by giving them a solid foundation in the both the theory and practice sides of leadership and governance. We will also cover leadership challenges that are unique to healthcare. The students will • learn models for health sector leadership • understand leadership at the individual, group and organizational levels • apply theories and other learnings from the material to case studies • develop and understand their own leadership style • be able to critically reflect on and discuss these topics |
| <b>Language</b>            | English   |
| <b>Limitation</b>          | This is a "Academic an Professional Skills" course Open to students from BSc and MSc programs in Health Sciences  |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=728">https://elearning.hsm-unilu.ch/course/view.php?id=728</a>   |
| <b>Exam</b>                | - Active participation during sessions and exercises (10%) - Assignments during semester (40%) - Written exam (50%)   |
| <b>Type of exam</b>        | participation, assignments, paper / 3 Credits   |
| <b>Note</b>                | Teaching methods: - Seminar/discussions - Inverted / Flipped Classroom - Case studies   |
| <b>Auditors</b>            | Yes   |
| <b>Contact</b>             | kathryn.dawson@unilu.ch   |
| <b>Material</b>            | Organizational Behavior & Theory in Healthcare, Leadership Perspectives and Management Applications, 2e (Walston, 2021)   |
| <b>Literature</b>          | Leadership in Healthcare (Turner, 2019)<br>Organizational Behavior & Theory in Healthcare, Leadership Perspectives and Management Applications, 2e (Walston, 2021)  |

**Science of Happiness**

|                       |  |
|-----------------------|--|
| <b>Lecturer</b>       | Eva De Clercq, PhD   |
| <b>Type of course</b> | Lecture  |
| <b>Code</b>           | FS241446   |
| <b>Semester</b>       | Spring semester 2024   |
| <b>Department</b>     | Health Sciences  |
| <b>Study level</b>    | Master   |
| <b>Date</b>           | Fr, 23.02.2024, 08:15 - 16:00, 4.B55<br>Fr, 26.04.2024, 08:15 - 16:00, 4.B55<br>Fr, 10.05.2024, 08:15 - 16:00, 4.B55   |
| <b>Further dates</b>  | • Class sessions aim to enable students to thrive personally, sustain passion for learning, and compassionately advance the greater good.<br>• Please note: the only way the course will make you happier is if you use the course as an impetus to put better habits into place. The path to becoming happier requires more than just learning the material. It involves actually putting it in work to set up the right habits and mindset. • Please always feel free to ask questions and clarify concepts • Screen free-policy: As we'll see during the course, the use of laptops, tablets, and cellphones in the classroom can impair learning. For this reason, I prefer you not to use laptops, tablets and other devices during this class. |
| <b>Duration</b>       | 2 hours per week per semester  |
| <b>Course content</b> | Don't worry be happy! Happiness is trendy in both academic and popular culture—self-help books and websites dedicated to the pursuit of happiness have proliferated over the last decade. This course will engage students in a multidisciplinary approach to well-being and happiness, drawing on fields such as philosophy, and positive psychology. Students will engage in a series of mini-experiments designed   |

to increase their happiness and build resilience. In addition, students will be introduced to readings from great thinkers who have pondered the question of happiness over the centuries (e.g. how can we measure happiness, how do we define happiness and perhaps more importantly how can we find it?). Our times of rapid change, and uncertainty, give these authors a new relevance. Ultimately students will be prepared to integrate these well-being theories and tools into their personal and professional lives.

The course begins by introducing the role of philosophy and (positive) psychology in the study of happiness. It then introduces some key ancient (Eastern and Western) and modern philosophers' views on happiness. We will then explore the contributions of positive psychology in helping us to become happier. We start by introducing some misconceptions that we may have about what makes for a flourishing life. We will then discuss what psychological research shows about what we should really be aiming for to improve our wellbeing and about how we can put these changes into practice. We will conclude the course by critically reflecting on what we have learned throughout the course.

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| <b>E-learning</b>          | <p>Students will be asked to listen to preparatory videos/podcasts. The links will be provided by the instructor. Students should be prepared to give a 2-minute description of what they learned from the videos.</p> <p>Get to know a philosopher:<br/> a) Socrates on self-confidence<br/> b) Epicurus on happiness<br/> c) Seneca on anger<br/> d) Schopenhauer on love<br/> e) Nietzsche on hardship</p> <p>Get to know a positive psychologist:<br/> a) Mihaly Csikszentmihalyi on the notion of Flow<br/> b) Barry Schwartz on The Paradox of Choice<br/> c) Carol S Dweck on The Power of Yet<br/> d) Sonja Lyubomirsky on Gratitude<br/> e) Dan Gilbert on our psychological immune system</p>   |
| <b>Learning objectives</b> | <p>Lower academic performance and the risk of dropping out of university have urged higher education institutions worldwide to consider mental wellbeing as a key educational goal. In fact, in many countries, including Switzerland, a significant number of students at higher education institutions suffer from mental health problems that affect their wellbeing and academic careers. The current course aims to promote reflective thinking but also to put into practice strategies about what makes us happy. The course is designed to create a positive environment to improve students' ability to manage their wellbeing. Course objectives: Students will: • Become familiar with some core philosophical and positive psychological approaches to well-being; • Experience first-hand exercises developed in the field of Positive Psychology to enhance well-being; • Understand the principles behind why certain activities can enhance well-being; • Learn how to use well-being theories and tools to enhance well-being in their personal and professional lives; • Learn how to think critically and how to contribute to making a class into a "community of inquiry"; • Acquire analytical and critical thinking skills and apply them to documents and sources in the field of healthcare and beyond; • Gain self-awareness of their character strengths.</p>  |
| <b>Prerequisites</b>       | <p>a) Class participation (20%) Given the nature of the course, it is important for students to contribute regularly and productively to class discussions and activities. These are grounded in assigned readings, videos and class lectures. In-class positive contributions are those that advance the discussion by formulating meaningful questions, presenting new ideas or insights, building on classmates' comments, or presenting counterpoints in a respectful way. Note: Students should be prepared to give a 2-minute description of what they learned from the assigned reading(s) (see literature) and videos (see e-learning). b) Personal mini-experiments or re-wirements (20%) Positive psychology is a relatively new branch of psychology that focuses on the promotion of happiness and well-being rather than on cures for mental illness, trauma, suffering or pain. Positive psychology interventions are evidence-based, intentional activities that aim to re-wire people's habits in order to enhance their overall well-being. They have proved to be effective in promoting happiness of the general public. Students will be asked to put some of these experiments to the empirical test, by critically assessing the strengths and challenges of these interventions as well as by reflecting on their personal response while completing them. The experiments include the following: (1) using your character strengths; (2) random acts of kindness; (3) using photography or music to increase savoring (i.e. noticing and appreciating the positive aspects of life); (4) Meditation; (5) Self-compassion. For more specific guidelines please see separate hand-out. For each experiment students will write a short written report (250 words). c) Personal project (10%) Students can choose to either: (1) Develop a regular mindfulness practice, (2) embark on a no-shopping practice, (3) commit to spending time regularly in nature or (4) keep a gratitude journal. By the end of the course, students are asked to write a brief reflection on their experience (see separate hand-out for more specific guidelines) (750-100 words). d) Living as a philosopher: learning by doing (20%) Philosophers are well-aware that we learn by doing. Happiness is no different. It is one thing to read and write about philosophies of happiness. It is another thing to reach or obtain happiness. As philosophers, we should also exercise some conscious reflection on the experience of trying to live out a philosophy of happiness, because writing out your experiences with a practice makes it clearer what you understand about the philosophy, what you find to be its limits or practicality, and what you think you could or should do better or differently, or reject, or embrace. For this mid-term assignment, students are requested to (1) pick one of the philosophies of happiness; (2) plan out how they could practice it for at least 5 days; (3) critically reflect on its pro and cons. For more specific guidelines and instructions please see separate handout. e) Final project: falling walls lab, engaging the public (30%) The Falling Walls lab is a unique international platform for scholars of science, business, politics, the arts and society. It aims to foster discussion on research among a broad audience from all parts of society. It was initiated on the occasion of the 20th anniversary of the fall of the Berlin wall. The question of each gathering is: which walls will fall next? This assignment asks students to break down the wall of cultural prejudice against happiness as a subject worthy of serious inquiry. They will be asked to create a public health speech on the importance of the philosophical and psychological approach to happiness for the general public. The speech can take several forms: a short video, a monologue etc. There are no limits to your creativity. For more specific guidelines and instructions please see separate hand-out.</p> |
| <b>Language</b>            | English   |
| <b>Limitation</b>          | Important: The course is limited to 25 participants. The limit is administered via MOODLE according to chronological order and registration. From 5 February 2024, 00:00, it will be possible to register via MOODLE. As soon as 25 participants are enrolled, the registration window will be closed automatically.  |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=724">https://elearning.hsm-unilu.ch/course/view.php?id=724</a>   |
| <b>Type of exam</b>        | Presentation, written paper / 3 Credits   |
| <b>Note</b>                | Teaching methods: Multiple teaching approaches will be used: lecture and discussion, exploration and inquiry, philosophical, experiments, experiential learning, cooperative group work and/or presentations.   |
| <b>Auditors</b>            | No  |
| <b>Contact</b>             | eva.declercq@unilu.ch   |
| <b>Literature</b>          | <p>Students should be prepared to give a 2-minute description of what they learned from the assigned reading(s).</p> <p>Bergsma, A., Poot, G. &amp; Liefbroer, A.C. (2008). Happiness in the Garden of Epicurus. <i>J Happiness Stud</i> 9, 397–423.<br/> Brauer, K., Proyer, R. Editorial: Introduction to the Special Issue "Well-being in Romantic Relationships". <i>Int J Appl Posit Psychol</i> (2023). <a href="https://doi.org/10.1007/s41042-023-00105-6">https://doi.org/10.1007/s41042-023-00105-6</a><br/> Crocker, J., &amp; Park, L. E. (2004). The costly pursuit of self-esteem. <i>Psychological Bulletin</i>, 130, 392-414.<br/> Dweck, C. S. (2007). The secret to raising smart kids. <i>Scientific American Mind</i>, 18(6), 36–43.<br/> Gable, S. L., &amp; Haidt, J. (2005). What (and why) is positive psychology? <i>Review of General Psychology</i>, 9, 103-110.</p>   |

- Gazica, M., & Spector, P. (2015). A comparison of individuals with unanswered callings to those with no calling at all. *Journal of Vocational Behavior*, 91, 1-10.
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95, 1045-1062.
- Lavin, K., Goeke-Morey, M. C., et al. (2020). The Role of Self-Compassion in College Students' Perceived Social Support. *Journal of Positive School Psychology* 4(1): 41-48.
- Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9, 111-131.
- MacKerron, G., & Mourato, S. (2013). Happiness is greater in natural environments. *Global Environmental Change*, 23(5), 992-1000.
- Mancini, A., & Bonanno, G. (2011). Loss and grief: The role of individual differences. In S. Southwick, B. Litz, D. Charney, & M. Friedman (Eds.), *Resilience and Mental Health: Challenges Across the Lifespan* (pp. 189-199). Cambridge: Cambridge University Press.
- Niemiec, C., Ryan, R., & Deci, E. (2009). The path taken: Consequences of attaining intrinsic and extrinsic aspirations in post-college life. *Journal of Research in Personality*, 43(3), 291-306.
- Oades, L., & Mossman, L. (2017). *The Science of Wellbeing and Positive Psychology*. In M. Slade, L. Oades, & A. Jarden (Eds.), *Wellbeing, Recovery and Mental Health* (pp. 7-23). Cambridge: Cambridge University Press. doi:10.1017/9781316339275.003
- Seligman, M. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Whillans, A. V., Dunn, E. W., Smeets, P., Bekkers, R., & Norton, M. I. (2017). Buying time promotes happiness. *Proceedings from the National Academy of Sciences*, 114, 8523-8527.

**Clinical Quality Indicators**

|                            |   |
|----------------------------|---|
| <b>Lecturer</b>            | Prof. Armin Gemperli  |
| <b>Type of course</b>      | Master seminar  |
| <b>Code</b>                | FS241424  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Master  |
| <b>Date</b>                | Th, 22.02.2024, 08:15 - 10:00, 4.B54<br>Th, 29.02.2024, 08:15 - 10:00, 4.B54<br>Th, 07.03.2024, 08:15 - 10:00, 4.B54<br>Th, 14.03.2024, 08:15 - 10:00, 4.B54<br>Th, 21.03.2024, 08:15 - 10:00, 4.B54<br>Th, 28.03.2024, 08:15 - 10:00, 4.B54<br>Th, 11.04.2024, 08:15 - 10:00, 4.B54<br>Th, 18.04.2024, 08:15 - 10:00, 4.B54<br>Th, 25.04.2024, 08:15 - 10:00, 4.B54<br>Th, 02.05.2024, 08:15 - 10:00, 4.B54<br>Th, 16.05.2024, 08:15 - 10:00, 4.B54<br>Th, 23.05.2024, 08:15 - 10:00, 4.B54<br>Tu, 11.06.2024, 14:00 - 14:30, HS 4 (Examination)   |
| <b>Duration</b>            | 2 hours per week per semester   |
| <b>Frequency</b>           | weekly  |
| <b>Course content</b>      | The module has a focus on initiatives to measure quality of care in Switzerland. It covers all major quality initiatives in Switzerland along the continuum of care and provides some comparison to related, more advanced initiatives in the USA and the UK.<br>- Definition and Classification of clinical quality indicators<br>- Common initiatives to measure quality in health care and their instruments<br>- The most common clinical quality indicators<br>- Clinical Outcome Assessment: Patient Reported Outcome Measures, Patient Reported Experience Measures<br>- Clinical quality indicators in acute inpatient care, inpatient rehabilitation and psychiatry, primary care, nursing homes and home care: characteristics and distinctions<br>- Summarizing and presenting quality indicators for benchmarking<br>- Home assignment: Description of a specific clinical quality indicator  |
| <b>Tags</b>                | Sustainability; Gender/diversity  |
| <b>E-learning</b>          | All teaching material will be provided via the e-learning platform moodle.  |
| <b>Learning objectives</b> | - Theoretical understanding of the principles of clinical indicators for quality measurement in health care - Being able to identify and appraise the most common clinical quality indicators and the dimensions of quality they are capturing - Knowing the main health care quality measurement initiatives in Switzerland, their aims and instruments - Appraise the different requirements for clinical quality indicators along the continuum of care - Familiarity with concepts of how quality indicators have been presented for benchmarking   |
| <b>Prerequisites</b>       | Active participation, diligence and eagerness to learn,   |
| <b>Language</b>            | English   |
| <b>Limitation</b>          | Mandatory for all students with Major Health Services Research  |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=705">https://elearning.hsm-unilu.ch/course/view.php?id=705</a>   |
| <b>Exam</b>                | Written examination and homework assignment.  |
| <b>Type of exam</b>        | written exam and homework / 3 Credits   |
| <b>Note</b>                | Teaching method(s): Lectures will include presentations, discussions and recapitulations.   |
| <b>Auditors</b>            | No  |
| <b>Contact</b>             | armin.gemperli@unilu.ch   |
| <b>Material</b>            | The teaching material is based on PowerPoint slides, videos, scientific articles or selected book chapters. All teaching material will be provided via the e-learning platform moodle.  |
| <b>Literature</b>          | Required reading (pdf will be provided via moodle):<br><br><ul style="list-style-type: none"> <li>• Mainz, J. "Defining and classifying clinical indicators for quality improvement." International Journal for Quality in Health Care (2003) 15(6):523-530.</li> </ul> Additional reading:<br><br><ul style="list-style-type: none"> <li>• Ahmed F, Bur, J, Roland M. "Measuring patient experience: concepts and methods." The patient. (2014) 7(3), 235–241.</li> <li>• Bartelt et al. "Quality monitoring and long-term care in Switzerland." In: Mor et al. (Eds.) Regulating Long-Term care quality. Cambridge: University Press. (2014).</li> <li>• Castle NG, Ferguson JC. "What is nursing home quality and how is it measured?." Gerontologist (2010) 50(4):426-442.</li> <li>• Djalali S, Frei A, Tandjung R, Baltensperger A, Rosemann T. "Swiss quality and outcomes framework: quality indicators for diabetes management in Swiss primary care based on electronic medical records." Gerontology. (2014) 60(3):263-73.</li> <li>• Hirdes JP, Fries BE, Morris JN, et al. "Home care quality indicators (HCQIs) based on the MDS-HC." Gerontologist. (2004) 44(5):665-679.</li> <li>• Lilford R, Pronovost P. "Using hospital mortality rates to judge hospital performance: a bad idea that just won't go away." BMJ. (2010) 340:c2016.</li> <li>• Morris JN, Fries BE, Frijters D, Hirdes JP, Steel RK. "interRAI home care quality indicators." BMC Geriatr. (2013) 13:127.</li> <li>• Sauro K, Ghali WA, Stelfox HT. "Measuring safety of healthcare: an exercise in futility?" BMJ Qual Saf. (2020) 29(4):341-344.</li> <li>• Wade DT. "Goal setting in rehabilitation: an overview of what, why and how." Clin Rehabil. (2009) 23(4):291-295.</li> <li>• Wagner A, Schaffert R, Möckli N, Zúñiga F, Dratva J. "Home care quality indicators based on the Resident Assessment Instrument-Home Care (RAI-HC): a systematic review." BMC Health Serv Res. (2020) 20(1):366.</li> <li>• Zimmerman DR, Karon SL, Arling G, et al. "Development and testing of nursing home quality indicators." Health Care Financ Rev. (1995) 16(4):107-127.</li> </ul> |

**Quantitative Methods**

|                            |   |
|----------------------------|---|
| <b>Lecturer</b>            | Dr. rer. nat. Oliver Grübner  |
| <b>Type of course</b>      | Lecture   |
| <b>Code</b>                | FS241039  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Bachelor  |
| <b>Date</b>                | Tu, 20.02.2024, 08:15 - 12:00, HS 10<br>Tu, 27.02.2024, 08:15 - 12:00, HS 10<br>Tu, 05.03.2024, 08:15 - 12:00, HS 10<br>Tu, 12.03.2024, 08:15 - 12:00, HS 10<br>Tu, 19.03.2024, 08:15 - 12:00, HS 10<br>Tu, 26.03.2024, 08:15 - 12:00, HS 10<br>Tu, 09.04.2024, 08:15 - 12:00, HS 10<br>Tu, 16.04.2024, 08:15 - 12:00, HS 10<br>Tu, 23.04.2024, 08:15 - 12:00, HS 10<br>Tu, 30.04.2024, 08:15 - 12:00, HS 10<br>Tu, 07.05.2024, 08:15 - 12:00, HS 10<br>Tu, 14.05.2024, 08:15 - 12:00, HS 10<br>Tu, 21.05.2024, 08:15 - 12:00, HS 10<br>Tu, 28.05.2024, 08:15 - 12:00, HS 10<br>Mo, 10.06.2024, 14:00 - 15:00, HS 9 (Examination) |
| <b>Further dates</b>       | Für die Bearbeitung von Übungen während der Veranstaltung arbeiten die Studierenden an ihren eigenen Laptops, auf denen sie die Statistik Software R sowie themenspezifische R Pakete installiert haben.  |
| <b>Duration</b>            | 4 hours per week per semester   |
| <b>Course content</b>      | Untersuchung von Unterschieden und Zusammenhängen<br>ANOVA<br>Lineare und logistische Regression<br>Methoden zur Dimensionsreduktion  |
| <b>Learning objectives</b> | Statistische Verfahren, die in den Gesundheitswissenschaften verwendet werden, differenzieren, selektieren und mithilfe der Statistiksoftware R anwenden.   |
| <b>Prerequisites</b>       | Die erfolgreiche Teilnahme an folgenden Kursen sind Voraussetzung: Mathematische Grundlagen der Gesundheitswissenschaften<br>Statistische Grundlagen und Datenvisualisierung mit R Epidemiologie  |
| <b>Language</b>            | Bilingue - German / English   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=711">https://elearning.hsm-unilu.ch/course/view.php?id=711</a>   |
| <b>Exam</b>                | Schriftliche Prüfung  |
| <b>Type of exam</b>        | Written examination / 6 Credits   |
| <b>Note</b>                | Lehrmethoden: Wöchentlich stattfindende Vorlesungen und Übungen. In den Vorlesungen erfolgt eine Wissensvermittlung anhand von Theorie und Beispielen. In den vertiefenden Übungen werden Übungsblätter zu den Themen der Vorlesung von den Studierenden bearbeitet. Vorlesung mit interaktiven Lernelementen, Übungen, flipped Classroom.  |
| <b>Auditors</b>            | Yes   |
| <b>Contact</b>             | oliver.gruebner@unilu.ch  |
| <b>Material</b>            | Präsentationen der Vorlesungen, Übungsmaterial und weitere Materialien für den Kurs werden auf Moodle zur Verfügung gestellt.   |
| <b>Literature</b>          | Hedderich, J., & Sachs, L. (2018). Angewandte Statistik. Springer Berlin Heidelberg.<br><a href="https://doi.org/10.1007/978-3-662-56657-2">https://doi.org/10.1007/978-3-662-56657-2</a>   |



**Statistical basics & data visualisation with R**

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|----------------------------|--|
| <b>Lecturer</b>            | Lukas Kauer, PhD   |
| <b>Type of course</b>      | Lecture/Exercise   |
| <b>Code</b>                | FS241043   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Bachelor   |
| <b>Date</b>                | Th, 22.02.2024, 09:15 - 12:00, HS 7<br>Th, 29.02.2024, 09:15 - 12:00, HS 7<br>Th, 07.03.2024, 09:15 - 12:00, HS 7<br>Th, 14.03.2024, 09:15 - 12:00, HS 7<br>Th, 21.03.2024, 09:15 - 12:00, HS 7<br>Th, 28.03.2024, 09:15 - 12:00, HS 7<br>Th, 11.04.2024, 09:15 - 12:00, HS 7<br>Th, 18.04.2024, 09:15 - 12:00, HS 7<br>Th, 25.04.2024, 09:15 - 12:00, HS 7<br>Th, 02.05.2024, 09:15 - 12:00, HS 7<br>Th, 16.05.2024, 09:15 - 12:00, HS 7<br>Th, 23.05.2024, 09:15 - 12:00, HS 7<br>Tu, 11.06.2024, 14:00 - 15:30, HS 1 (Examination)  |
| <b>Duration</b>            | 2 hours per week per semester  |
| <b>Course content</b>      | <p>Data is now the most valuable resource in the world. This module offers a practical introduction to basic statistics and data visualization using the open-source software R. Through a series of focused lessons and hands-on exercises, students will learn essential techniques for conducting basic data analysis and creating simple visualizations. This course provides a solid starting point for further exploration in data analysis.</p> <p>We will cover the following questions:</p> <ul style="list-style-type: none"> <li>• What is R and what advantages does it offer?</li> <li>• What are the different types of data and variables?</li> <li>• How can we use R to visualize data with different types of graphs (e.g., line graph, bar charts, scatterplot, histograms)?</li> <li>• Which type of graph to use for which type of variables?</li> <li>• How to use R to prepare data for analysis</li> <li>• What is reproducibility and what role does it play in handling data?</li> <li>• What is descriptive statistics and how can we use it to describe data?</li> </ul> |
| <b>Learning objectives</b> | At the end of this module, students will be able to use the open source software R to - Analyze data in a reproducible way (using Rmarkdown) - Process data (using tidyverse) - Visualize data using tables and graphs (with ggplot2) In addition, students will understand and perform descriptive statistics: - Measures of central tendency (mean, median, mode). - Measures of variability and of position (variance, standard deviation, quantiles, interquartile range)  |
| <b>Language</b>            | English  |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=713">https://elearning.hsm-unilu.ch/course/view.php?id=713</a>  |
| <b>Exam</b>                | Schriftliche Prüfung   |
| <b>Type of exam</b>        | Written examination / 3 Credits  |
| <b>Note</b>                | Teaching methods: Weekly lecture mixed with exercises during class and quizzes to test learning objectives   |
| <b>Auditors</b>            | No   |
| <b>Contact</b>             | lukas.kauer@unilu.ch   |
| <b>Material</b>            | Will be provided on Moodle.  |
| <b>Literature</b>          | Brown, D.S. (2022) Statistics and Data Visualization Using R – The Art and Practice of Data Analysis, Sage.<br>Healy, K. (2018), Data Visualization: A Practical Introduction, Princeton University Press, socviz.co.<br>Mehmetoglu, M. & M. Mittner (2022) Applied Statistics Using R – A Guide for the Social Sciences, Sage.<br>Phillips, N. D. (2018). YaRrr! The Pirate's Guide to R. <a href="https://bookdown.org/ndphillips/YaRrr/">https://bookdown.org/ndphillips/YaRrr/</a> .<br>Sauer, S. Moderne Datenanalyse mit R: Daten einlesen, aufbereiten, visualisieren, modellieren und kommunizieren. (Springer-Verlag, n.d.).  |

**Survey Methodology (ARM)**

|                            |  |
|----------------------------|--|
| <b>Lecturer</b>            | Sarah Mantwill, PhD  |
| <b>Type of course</b>      | Lecture  |
| <b>Code</b>                | FS241044   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Master   |
| <b>Date</b>                | Tu, 20.02.2024, 16:15 - 18:00, HS 2<br>Tu, 27.02.2024, 16:15 - 18:00, HS 2<br>Tu, 05.03.2024, 16:15 - 18:00, HS 2<br>Tu, 12.03.2024, 16:15 - 18:00, HS 2<br>Tu, 19.03.2024, 16:15 - 18:00, HS 2<br>Tu, 26.03.2024, 16:15 - 18:00, HS 2<br>Tu, 09.04.2024, 16:15 - 18:00, HS 2<br>Tu, 16.04.2024, 16:15 - 18:00, HS 2<br>Tu, 23.04.2024, 16:15 - 18:00, HS 2<br>Tu, 30.04.2024, 16:15 - 18:00, HS 2<br>Tu, 07.05.2024, 16:15 - 18:00, HS 2<br>Tu, 14.05.2024, 16:15 - 18:00, HS 2<br>Tu, 21.05.2024, 16:15 - 18:00, HS 2<br>Tu, 28.05.2024, 16:15 - 18:00, HS 2   |
| <b>Duration</b>            | 2 hours per week per semester  |
| <b>Course content</b>      | This course will introduce students to applied research methods in health sciences. The course will provide an overview of methodological issues relevant to conducting research in the health sciences, with an emphasis on survey research methods.<br>Topics covered in this course are: development of research questions, operationalization of concepts and measurement, as well as survey development and administration, including sampling, data collection and review of ethical considerations  |
| <b>E-learning</b>          | References to relevant online tutorials/videos will be provided (available through Moodle).  |
| <b>Learning objectives</b> | The overarching aim of the course is to equip students with a working knowledge and the necessary skills to develop and conduct independent survey research projects in the health sciences. Upon completion of the course, students should: • have a hands-on understanding of the scientific process and the different steps of the research loop, • be able to identify appropriate methods to investigate a research question, and • be able to critically assess survey research methods, including instrumentation, sampling methods and administration  |
| <b>Prerequisites</b>       | 1. Group project (max. 4 students) that should consist of developing a research proposal for a survey study, including a short summary of the results from a pretest (more information to follow during class). The group work will be graded with a grade between 1-6 and will count 80% towards the final grade. Groups will have to hand in the proposal (max. 10 pages, excl. references & max. 5 pages on results from pretest). Grading will be based 80% on the overall group work and 20% on individual and peer assessment (each student will have to write a short summary, max. 2 pages, of their contribution to the project and will have to evaluate the group members' contribution). 2. Active participation in class (including group exercises) will be graded and will count 20% towards the final grade. |
| <b>Language</b>            | English  |
| <b>Limitation</b>          | This course is a "Academic Research Methods" course  |
| <b>Exam</b>                | Group project, active participation, assignment / 3 Credits  |
| <b>Type of exam</b>        | Group project, active participation, assignment / 3 Credits  |
| <b>Note</b>                | Teaching methods: Lectures, in-class exercises, group work and in-class presentations. Students will develop and pretest, as a group project, a small survey study that should cover all key aspects of the research loop. Students will be assigned early on to their group and will be encouraged to develop their research question(s) and research proposal throughout the course.   |
| <b>Auditors</b>            | Yes  |
| <b>Contact</b>             | sarah.mantwill@unilu.ch  |
| <b>Material</b>            | • Slides and exercises • Research articles (available through Moodle) • References to relevant book chapters and online tutorials/videos will be provided (available through Moodle) All material will be provided via the e-learning platform Moodle  |
| <b>Literature</b>          | Reading list will be made available on Moodle.   |

**Health Behavior Theories and Interventions**

|                            |   |
|----------------------------|---|
| <b>Lecturer</b>            | Prof. Dr. Gisela Michel Martina Irina Ospelt, MSc Dr. sc. Anica Ilic Anna Katharina Vokinger, MA, Michel / Ospelt / Ilic / Vokinger   |
| <b>Type of course</b>      | Master seminar  |
| <b>Code</b>                | FS241026  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Master  |
| <b>Date</b>                | We, 21.02.2024, 08:15 - 10:00, HS 8<br>We, 28.02.2024, 08:15 - 10:00, HS 8<br>We, 06.03.2024, 08:15 - 10:00, HS 8<br>We, 13.03.2024, 08:15 - 10:00, HS 8<br>We, 20.03.2024, 08:15 - 10:00, HS 8<br>We, 27.03.2024, 08:15 - 10:00, HS 8<br>We, 10.04.2024, 08:15 - 10:00, HS 8<br>We, 17.04.2024, 08:15 - 10:00, HS 8<br>We, 24.04.2024, 08:15 - 10:00, HS 8<br>We, 01.05.2024, 08:15 - 10:00, HS 8<br>We, 08.05.2024, 08:15 - 10:00, HS 8<br>We, 15.05.2024, 08:15 - 10:00, HS 8<br>We, 22.05.2024, 08:15 - 10:00, HS 8<br>We, 29.05.2024, 08:15 - 10:00, HS 8<br>Fr, 14.06.2024, 08:15 - 09:45, HS 1 (Examination) |
| <b>Duration</b>            | 4 hours per week per semester   |
| <b>Frequency</b>           | weekly  |
| <b>Course content</b>      | <ul style="list-style-type: none"> <li>• Health Behavior in the Context of the "New" Public Health</li> <li>• How Theory informs Health Promotion and Public Health Practice</li> <li>• Value-Expectancy Theories</li> <li>• Models Based on Perceived Threat and Fear Appeals</li> <li>• Stage Models for Health Promotion</li> <li>• Social Cognitive Theories</li> <li>• Health Communication</li> <li>• Ecological Approaches</li> <li>• Social Network Theory</li> <li>• Diffusion of Innovations Theory</li> </ul>  |
| <b>Tags</b>                | Sustainability; Gender/diversity  |
| <b>E-learning</b>          | All teaching material (except book) is provided via the e-learning platform moodle.   |
| <b>Learning objectives</b> | - To know the different theories of health behavior - To know possibilities of intervention to change health behavior Other Learning objectives: - To transfer the knowledge of different theories of health behavior into practice - To critically acclaim scientific articles on health behavior theories   |
| <b>Prerequisites</b>       | The course credits will be earned by active participation, individual oral presentation, and exam.  |
| <b>Language</b>            | English   |
| <b>Limitation</b>          | priority MSc Health Sciences students Core course for all students with Major Health Social Behavior.   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=700">https://elearning.hsm-unilu.ch/course/view.php?id=700</a>   |
| <b>Exam</b>                | Active participation, oral presentations, and exam.   |
| <b>Type of exam</b>        | Active participation, oral presentations, and exam. / 6 Credits   |
| <b>Note</b>                | Teaching method(s): Lectures, practical group exercises, tutorials and class/online discussions, group presentations, individual student presentations at end of course.  |
| <b>Auditors</b>            | Yes   |
| <b>Contact</b>             | gisela.michel@unilu.ch / martina.ospelt@unilu.ch / anica.ilic@unilu.ch / anna.vokinger@unilu.ch   |
| <b>Material</b>            | All teaching material (except book) is provided via the e-learning platform moodle.   |
| <b>Literature</b>          | <p>Mandatory course book:</p> <ul style="list-style-type: none"> <li>• DiClemente, Crosby, Salazar (2019). Health Behavior Theory for Public Health – Principles, Foundations and Applications, Second Edition. Jones and Bartlett Learning.</li> </ul> <p><a href="http://www.jblearning.com/catalog/9781284129885/">http://www.jblearning.com/catalog/9781284129885/</a></p> <p>Scientific papers will be available on moodle.</p>  |

**Empowering Health Communication: Addressing Vulnerable Target Groups and Sensitive Topics**

|                            |   |
|----------------------------|---|
| <b>Lecturer</b>            | Dr. Alexander Ort   |
| <b>Type of course</b>      | Lecture   |
| <b>Code</b>                | FS241423  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Master  |
| <b>Date</b>                | We, 21.02.2024, 16:15 - 18:00, 3.B57<br>We, 28.02.2024, 16:15 - 18:00, 3.B57<br>We, 06.03.2024, 16:15 - 18:00, 3.B57<br>We, 13.03.2024, 16:15 - 18:00, 3.B57<br>We, 20.03.2024, 16:15 - 18:00, 3.B57<br>We, 27.03.2024, 16:15 - 18:00, 3.B57<br>We, 10.04.2024, 16:15 - 18:00, 3.B57<br>We, 17.04.2024, 16:15 - 18:00, 3.B57<br>We, 24.04.2024, 16:15 - 18:00, 3.B57<br>We, 01.05.2024, 16:15 - 18:00, 3.B57<br>We, 08.05.2024, 16:15 - 18:00, 3.B57<br>We, 15.05.2024, 16:15 - 18:00, 3.B57<br>We, 22.05.2024, 16:15 - 18:00, 3.B57<br>We, 29.05.2024, 16:15 - 18:00, 3.B57  |
| <b>Duration</b>            | 2 hours per week per semester   |
| <b>Course content</b>      | See detailed semester plan on Moodle.   |
| <b>Tags</b>                | Gender/diversity  |
| <b>Learning objectives</b> | This seminar delves into the nuances of health communication and offers an in-depth exploration of the necessity to account for the needs of vulnerable populations when communicating about health. It is designed to highlight the criticality of understanding needs and barriers to health information seeking. Shedding light on these aspects provides the ground to harness communication strategies effectively to reach out to diverse and at-risk communities. By following a hands-on empirical approach, students will get the chance to investigate and identify unique needs within vulnerable populations and for sensitive topics. The course provides a platform to understand and practice translating these insights into concrete communicative concepts and interventions. In doing so, the seminar aims to elevate awareness and cultivate the skills required for these challenging communication tasks. Students will gain experience in this highly relevant context and acquire a toolkit of resources that enables them to craft nuanced messages and interventions. |
| <b>Language</b>            | English   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=704">https://elearning.hsm-unilu.ch/course/view.php?id=704</a>   |
| <b>Exam</b>                | Written paper   |
| <b>Type of exam</b>        | written paper / 3 Credits   |
| <b>Auditors</b>            | No  |
| <b>Contact</b>             | alexander.ort@unilu.ch  |
| <b>Material</b>            | See course materials provided on moodle.  |
| <b>Literature</b>          | See readings provided on moodle.  |

**Social Impact of Health**

|                            |  |
|----------------------------|--|
| <b>Lecturer</b>            | Ass.-Prof. Diana Patricia Pacheco Barzallo   |
| <b>Type of course</b>      | Lecture/Exercise   |
| <b>Code</b>                | FS241041   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Master   |
| <b>Date</b>                | Tu, 20.02.2024, 14:15 - 16:00, 4.B54<br>Tu, 27.02.2024, 14:15 - 16:00, 4.B54<br>Tu, 05.03.2024, 14:15 - 16:00, 4.B54<br>Tu, 12.03.2024, 14:15 - 16:00, 4.B54<br>Tu, 19.03.2024, 14:15 - 16:00, 4.B54<br>Tu, 26.03.2024, 14:15 - 16:00, 4.B54<br>Tu, 09.04.2024, 14:15 - 16:00, 4.B54<br>Tu, 16.04.2024, 14:15 - 16:00, 4.B54<br>Tu, 23.04.2024, 14:15 - 16:00, 4.B54<br>Tu, 30.04.2024, 14:15 - 16:00, 4.B54<br>Tu, 07.05.2024, 14:15 - 16:00, 4.B54<br>Tu, 14.05.2024, 14:15 - 16:00, 4.B54<br>Tu, 21.05.2024, 14:15 - 16:00, 4.B54<br>Tu, 28.05.2024, 14:15 - 16:00, 4.B54<br>We, 19.06.2024, 08:15 - 09:15, HS 1 (Examination)  |
| <b>Further dates</b>       | Understanding basic statistical/econometric methods is desirable.  |
| <b>Duration</b>            | 2 hours per week per semester  |
| <b>Course content</b>      | Each lecture will focus on different important areas for the society where health is a key element. The topics covered include how health is related to poverty, inequality, education, labor market, unemployment, crime, among others. It also discusses the role of social insurances which include health insurance, disability insurances, unemployment insurances, among others.<br><br>The reading for each lecture will largely be based upon articles from journals in the field of social policy. Many of these are available on the Web. By the end of the course, the students should have a greater understanding of how health determine several social spheres. Also, students should be able to discuss, from theory and methodologically, how to measure the impact of health on society. |
| <b>Learning objectives</b> | The course is devoted to the study of how health impact/determine other areas of people's life. The approach used is both theoretical and analyzing empirical applications. At the end of the course, students should be able to - To have a global understanding of how much individual health matters for public health - To understand why public health should be at the center of any policy intervention - To explain how much health matters for economic outcomes in the short and in the long-run - To understand the needs and effects of different social insurances targeting health outcomes - To have an overview of how to measure causal impact of health on different outcomes  |
| <b>Prerequisites</b>       | Final exam: 40% Paper discussion: 30% Assignment: 30%  |
| <b>Language</b>            | English  |
| <b>Limitation</b>          | Understanding of basic statistical/econometric methods is desirable. Mandatory in the Major "Health Services Research"   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=702">https://elearning.hsm-unilu.ch/course/view.php?id=702</a>  |
| <b>Exam</b>                | Data analysis assignment, paper discussion, a written examination, and class participation.  |
| <b>Type of exam</b>        | Data analysis assignment, paper discussion, a written examination, and class participation. / 3 Credits  |
| <b>Note</b>                | Teaching method(s): The class will consist of the presentation of analysis and discussion of specific applied papers measuring the impact of health. Scientific papers will be presented showing their motivation, design, quantitative methods, and results. Group work will exemplify perspectives. Attendance and active participation are expected for all class sessions. An assignment will be part of the grading. The assignment will be solved individually or in groups (self-study). Also, students are expected to present and discuss a paper on the topic. Papers for discussion will be provided via Moodle.  |
| <b>Auditors</b>            | Yes  |
| <b>Contact</b>             | diana.pacheco@unilu.ch   |
| <b>Material</b>            | The teaching material is based on PowerPoint slides, scientific articles, a data analysis exercise, and selected book chapters. There is no specific textbook for the course, but some chapters indicated, as "supporting material" in a few textbooks may be useful as a complement to the lecture notes. Otherwise, we will mostly rely on original sources such as scientific journal articles and working papers. Readings will be made available on Moodle before their discussion in class.  |

**Digital Health and Information Systems**

|                            |   |
|----------------------------|---|
| <b>Lecturer</b>            | Martin Raab, MSc Fenella Beynon, Raab / Beynon  |
| <b>Type of course</b>      | Lecture   |
| <b>Code</b>                | FS241015  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Bachelor  |
| <b>Date</b>                | We, 21.02.2024, 12:30 - 14:00, 3.A05<br>We, 28.02.2024, 12:30 - 14:00, 3.A05<br>We, 06.03.2024, 12:30 - 14:00, 3.A05<br>We, 13.03.2024, 12:30 - 14:00, 3.A05<br>We, 20.03.2024, 12:30 - 14:00, 3.A05<br>We, 27.03.2024, 12:30 - 14:00, 3.A05<br>We, 10.04.2024, 12:30 - 14:00, 3.A05<br>We, 17.04.2024, 12:30 - 14:00, 3.A05<br>We, 24.04.2024, 12:30 - 14:00, 3.A05<br>We, 01.05.2024, 12:30 - 14:00, 3.A05<br>We, 08.05.2024, 12:30 - 14:00, 3.A05<br>We, 15.05.2024, 12:30 - 14:00, 3.A05<br>We, 22.05.2024, 12:30 - 14:00, 3.A05<br>We, 29.05.2024, 12:30 - 14:00, 3.A05  |
| <b>Duration</b>            | 2 hours per week per semester   |
| <b>Course content</b>      | <ol style="list-style-type: none"> <li>1. Basic Digital Health concepts and definitions including the classification of digital health interventions</li> <li>2. Key themes in Digital Health and how they can support healthcare delivery and management</li> <li>3. Strategy, governance and policy making in digital health</li> <li>4. International trends, barriers, success factors, expectations on benefits, evidence base</li> <li>5. Key technological aspects: web-based systems and mHealth; proprietary vs open-source; IT infrastructure</li> <li>6. Interoperability and health data coding and classification</li> <li>7. Establishing a Digital Health vision and a strategy</li> <li>8. Privacy, Security and Legal aspects</li> <li>9. Digital Health Strategy, Governance and Policy-Making</li> <li>10. mHealth and its specificities</li> <li>11. Project and Change Management in Digital Health – complexities around implementing socio-technical systems</li> <li>12. Quality of care and clinical decision support systems</li> <li>13. Chronic disease management and digital interventions to support self-monitoring</li> <li>14. Data for decision making I: Civil registration and vital statistics</li> <li>15. Data for decision making II: Health information systems &amp; disease surveillance</li> <li>16. Approaches to implementing, monitoring and evaluating digital health interventions</li> </ol>   |
| <b>Tags</b>                | Sustainability  |
| <b>Learning objectives</b> | <p>Digital Health –the application of information and communication technology to health– has a major role in strengthening health systems around the world, including in low and middle income countries. Governments, non-governmental organisations and donors are increasingly investing in digital health to improve access and quality of health information, enhance healthcare processes, achieve better quality of care and improve health outcomes. As health systems become increasingly dependent on digital health interventions, it is crucial that decision-makers in the health domain have a comprehensive understanding of digital health – what it is, what are its implications, benefits or barriers, what are the best practices – so that interventions in the field can make the best use of such technologies to improve the health status of individuals and populations. Despite its potential, the many facets of digital health (from the clinical, regulatory, technological or social points of view, to name a few) often contribute to making initiatives in this domain complex and challenging endeavors. Key factors in the design and implementation of digital health interventions contribute to the degree to which they are acceptable and usable to users and the extent to which they support (or do not support) intended improvements in health and health systems. But critical gaps in the evidence-base for digital health pose challenges to informed decision-making on digital health interventions. This module aims to provide students with an overview of digital health, and the landscape of key digital health interventions, with practical examples from Switzerland and around the world. In addition, it will cover priority topics relating to the Principles for Digital Development to provide students with a strong foundation in the design and implementation of digital health interventions. Learning outcomes: • Understand the role of data, information and evidence in health care. • Understand the implications, constraints and opportunities in the application of Digital Health in a health system • Be able to influence and steer Digital Health initiatives for maximal results • Be aware of international best practices and success factors in Digital Health • Have the essential knowledge required to take managerial decisions related to Digital Health</p> |
| <b>Language</b>            | English   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=731">https://elearning.hsm-unilu.ch/course/view.php?id=731</a>   |
| <b>Exam</b>                | Group work paper  |
| <b>Type of exam</b>        | Group work paper / 3 Credits  |
| <b>Note</b>                | Lehr- und Lernformate Inverted / Flipped Classroom, etc.): Introductory lectures, Group work  |
| <b>Auditors</b>            | No  |
| <b>Contact</b>             | <a href="mailto:martin.raab@swisstph.ch">martin.raab@swisstph.ch</a> / <a href="mailto:fenella.beynon@swisstph.ch">fenella.beynon@swisstph.ch</a>   |
| <b>Literature</b>          | <ul style="list-style-type: none"> <li>• Health Informatics Forum MOOC: <a href="http://www.healthinformaticsforum.com/MOOC">http://www.healthinformaticsforum.com/MOOC</a></li> <li>• -mHealth Planning Guide: Key Considerations for Integrating Mobile Technology into Health Programs: <a href="https://www.k4health.org/toolkits/mhealth-planning-guide">https://www.k4health.org/toolkits/mhealth-planning-guide</a></li> <li>• Cochrane Review on mobile technologies. <a href="https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012927.pub2/full">https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012927.pub2/full</a></li> <li>• Classification of digital health interventions: <a href="https://apps.who.int/iris/bitstream/handle/10665/260480/WHO-RHR-18.06-eng.pdf">https://apps.who.int/iris/bitstream/handle/10665/260480/WHO-RHR-18.06-eng.pdf</a></li> </ul>   |

**Social Marketing and Health Campaigns**

|                            |   |
|----------------------------|---|
| <b>Lecturer</b>            | Prof. Sara Rubinelli, PhD   |
| <b>Type of course</b>      | Master seminar  |
| <b>Code</b>                | FS241042  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Master  |
| <b>Date</b>                | Th, 29.02.2024, 10:15 - 12:00, 4.B54<br>Th, 07.03.2024, 10:15 - 12:00, 4.B54<br>Th, 14.03.2024, 10:15 - 12:00, 4.B54<br>Th, 21.03.2024, 10:15 - 12:00, 4.B54<br>Th, 28.03.2024, 10:15 - 12:00, 4.B54<br>Th, 11.04.2024, 10:15 - 12:00, 4.B54<br>Th, 18.04.2024, 10:15 - 12:00, 4.B54<br>Th, 25.04.2024, 10:15 - 12:00, 4.B54<br>Th, 02.05.2024, 10:15 - 12:00, 4.B54<br>Th, 16.05.2024, 10:15 - 12:00, 4.B54<br>Th, 23.05.2024, 10:15 - 12:00, 4.B54  |
| <b>Duration</b>            | 2 hours per week per semester   |
| <b>Frequency</b>           | weekly  |
| <b>Course content</b>      | The list of main topic includes:<br><ul style="list-style-type: none"> <li>• Theories and model of persuasion</li> <li>• Persuasion technologies</li> <li>• Persuasion research</li> <li>• Designing health messages</li> <li>• Principles of health campaigns</li> <li>• Basics of social marketing</li> <li>• Principles of health advertising</li> <li>• Evaluation of health campaigns and health interventions that use social marketing</li> </ul>  |
| <b>E-learning</b>          | All teaching material is provided via the e-learning platform moodle.   |
| <b>Learning objectives</b> | To master the foundations of theory, research and practice of mass media led campaign, health advertising and 'social marketing' as the use of marketing techniques to benefit the target audience and the general society. More specifically, the course aim to equip students with knowledge and skills: • To understand the significance of theories in health communication campaigns and advertising • To plan, design, implement and evaluate health campaigns and health interventions that use social marketing. • To design and evaluate health advertising, with a focus on the different contexts where health advertising can be used |
| <b>Prerequisites</b>       | By the end of this course, students should be able to: - identify challenges and solutions in influencing health behavior, - understand the role of theories in planning interventions targeted to health behavior, - master theory, research and practise to generating successful health campaigns and health interventions that use social marketing - develop and implement evaluation plans to assess the impact of health campaigns and health interventions that use social marketing - develop health advertising for appropriate decision-making by patients and consumers.  |
| <b>Language</b>            | English   |
| <b>Limitation</b>          | priority MSc Health Sciences students Core course for all students with Major Health Communication.   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=595">https://elearning.hsm-unilu.ch/course/view.php?id=595</a>   |
| <b>Exam</b>                | The final grade for this course will be based on a class project. Specifically, students will be asked to conduct a social marketing project including theoretical and empirical sections.  |
| <b>Type of exam</b>        | written assignment / 3 Credits  |
| <b>Note</b>                | Teaching method(s): This course will be conducted through interactive classes (including presentations from both the lecturer and students and class discussions) and class projects based on role-play exercises.  |
| <b>Auditors</b>            | Yes   |
| <b>Contact</b>             | sara.rubinelli@unilu.ch   |
| <b>Material</b>            | The teaching material is based on PowerPoint slides, videos, scientific articles and selected sections of books.  |
| <b>Literature</b>          | - O'Keefe D. Persuasion: theory and research. Sage 2002.<br>- McKenzie J et al. Planning, implementing and evaluating health promotion programs. A primer (6th edition). Benjamin Cummings 2012.<br>- Rice R., Atkin C. Public Communication Campaigns. Sage 2013.<br>- Lee N, Kotler P. Social marketing. Sage 2011.   |

**Health Communication**

|                            |  |
|----------------------------|--|
| <b>Lecturer</b>            | Prof. Sara Rubinelli, PhD  |
| <b>Type of course</b>      | Master seminar   |
| <b>Code</b>                | FS241027   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Master   |
| <b>Date</b>                | We, 28.02.2024, 10:15 - 12:00, 4.B47<br>We, 06.03.2024, 10:15 - 12:00, 4.B47<br>We, 13.03.2024, 10:15 - 12:00, 4.B47<br>We, 20.03.2024, 10:15 - 12:00, 4.B47<br>We, 27.03.2024, 10:15 - 12:00, 4.B47<br>We, 10.04.2024, 10:15 - 12:00, 4.B47<br>We, 17.04.2024, 10:15 - 12:00, 4.B47<br>We, 24.04.2024, 10:15 - 12:00, 4.B47<br>We, 01.05.2024, 10:15 - 12:00, 4.B47<br>We, 08.05.2024, 10:15 - 12:00, 4.B47<br>We, 15.05.2024, 10:15 - 12:00, 4.B47<br>We, 22.05.2024, 10:15 - 12:00, 4.B47<br>We, 29.05.2024, 10:15 - 12:00, 4.B47<br>Mo, 17.06.2024, 12:00 - 14:00, HS 1 (Examination)  |
| <b>Duration</b>            | 2 hours per week per semester  |
| <b>Frequency</b>           | weekly   |
| <b>Course content</b>      | The list of main topic includes:<br><ul style="list-style-type: none"> <li>• Patient/consumer education, health literacy and empowerment</li> <li>• Patient/provider communication</li> <li>• Principles of organizational and mass media health communication</li> <li>• Risk communication</li> <li>• Technology enhanced health communication</li> <li>• Health communication programs (planning, strategic design, implementation and evaluation)</li> </ul>   |
| <b>E-learning</b>          | All teaching material will be provided via the e-learning platform moodle.   |
| <b>Learning objectives</b> | To master the foundations of theory, research and practice of health communication, with a focus on how messages in interpersonal, organizational and media contexts can affect health beliefs and behavior. More specifically, the course aim to equip students with knowledge and skills: <ul style="list-style-type: none"> <li>• To identify contexts where health communication can be challenging and to master its main related topics and issues;</li> <li>• To analyze communication in health care delivery, health care organizations, as well as health promotion and disease prevention;</li> <li>• To identify benefits and challenges behind different communicative channels, and the use of diverse communication media and technologies;</li> <li>• To design empirical studies to evaluate the impact of communication in different health contexts and to enhance its quality;</li> <li>• To master strategies for generating successful or beneficial health-related communication in different context. By the end of this course, students should be able to: <ul style="list-style-type: none"> <li>• identify a variety of health communication topics,</li> <li>• understand the theoretical foundations underlying differences in the ways individuals communicate about health and their impact and</li> <li>• master research and practice to generating successful health-related communication in the context of problematic communicative trends.</li> </ul> </li> </ul> |
| <b>Language</b>            | English  |
| <b>Limitation</b>          | priority MSc Health Sciences students Core course for all students with Major Health Communication.  |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=597">https://elearning.hsm-unilu.ch/course/view.php?id=597</a>  |
| <b>Exam</b>                | The final exam of this course is written. The test will be composed of open questions based on the lectures and the reading material provided during the course.   |
| <b>Type of exam</b>        | written exam, class participation, presentation / 6 Credits  |
| <b>Note</b>                | Teaching method(s): This course will be conducted through interactive classes (including presentations from both the lecturer and students and class discussions).   |
| <b>Auditors</b>            | Yes  |
| <b>Contact</b>             | sara.rubinelli@unilu.ch  |
| <b>Material</b>            | The teaching material is based on PowerPoint slides, videos, scientific articles and selected sections of books.   |
| <b>Literature</b>          | Wright KB, Sparks L, O'Hair HD. Health communication in the 21st Century. Wiley – Blackwell 2013.<br><br>Do Kyun Kim et al. Health communication. Strategies for developing global health programs. Peter Lang 2013.<br><br>Martin LR et al. The Oxford handbook of health communication, behavior change and treatment adherence. Oxford University Press 2013.<br><br>Hyunyi Cho. Health communication message design. Theory and practice. Sage 2012.<br><br>Parvanta C., Nelson D., Parvanta S., Harner R. Essentials of public health communication. Jones & Bartlett Learning 2011.<br><br>Jerry et al. Health communication in the new media landscape. Springer 2008.<br><br>Apker J. Communication in health organizations. Polity 2011.<br><br>Glanz K et al. Health behavior and health education: theory, research and practice. Jossey-Boss 2008.<br><br>Cottrel et al. Principles and foundations of health promotion and education. Benjamin Cummings 2011.<br><br>Sharma M. Theoretical foundations of health education and health promotion. Jones & Bartlett Learning 2010.  |



**Healthy Ageing and Person-Centered Care**

|                            |   |
|----------------------------|---|
| <b>Lecturer</b>            | Ass.-Prof. Carla Sabariego Tomas  |
| <b>Type of course</b>      | Lecture/Exercise  |
| <b>Code</b>                | FS241031  |
| <b>Semester</b>            | Spring semester 2024  |
| <b>Department</b>          | Health Sciences   |
| <b>Study level</b>         | Bachelor<br>Master  |
| <b>Date</b>                | Th, 22.02.2024, 14:15 - 16:00, 4.B47<br>Th, 29.02.2024, 14:15 - 16:00, 4.B47<br>Th, 07.03.2024, 14:15 - 16:00, 4.B47<br>Th, 14.03.2024, 14:15 - 16:00, 4.B47<br>Th, 21.03.2024, 14:15 - 16:00, 4.B47<br>Th, 28.03.2024, 14:15 - 16:00, 4.B47<br>Th, 11.04.2024, 14:15 - 16:00, 4.B47<br>Th, 18.04.2024, 14:15 - 16:00, 4.B47<br>Th, 25.04.2024, 14:15 - 16:00, 4.B47<br>Th, 02.05.2024, 14:15 - 16:00, 4.B47<br>Th, 16.05.2024, 14:15 - 16:00, 4.B47<br>Th, 23.05.2024, 14:15 - 16:00, 4.B47<br>Th, 20.06.2024, 15:00 - 16:00, HS 9 (Examination)   |
| <b>Further dates</b>       | Teaching method(s)/Indications: Lectures, exercises, problem-oriented learning, plenary presentations and discussions   |
| <b>Duration</b>            | 2 hours per week per semester   |
| <b>Course content</b>      | The course is structured in units, namely: <ol style="list-style-type: none"> <li>1) Introduction to healthy ageing and person-centered care</li> <li>2) Biological ageing</li> <li>3) Operationalization, measurement and use of healthy ageing trajectories</li> <li>4) Health strategies and person-centered care I: rehabilitation</li> <li>5) Health strategies and person-centered care II: environmental factors</li> <li>6) Health strategies and person-centered care III: palliative care</li> <li>7) Health strategies and person-centered care IV: long-term and integrated care</li> <li>8) Health strategies and person-centered care V: geriatric care</li> </ol> <p>The course additionally includes three problem-oriented learning exercises, which allow students to apply the content learned in previous units. The last day of the course is devoted to a consensus exercise ("grand challenges for healthy ageing and person-centered care") to support students making sense of the content from the entire course.</p> <p>Besides teachers of the University of Lucerne, the course will include guest lectures.</p> |
| <b>E-learning</b>          | Some guests will hold lectures via zoom.  |
| <b>Learning objectives</b> | • To get familiar with the relevance, definitions, classifications and measurement approaches used in the field of healthy ageing; • To get familiar with the relevance, definitions and classifications of a range of health strategies that are based on person-centered care and its specificities for health services research; • To become able to design and plan a health services research study focused on healthy ageing and person-centered care.  |
| <b>Language</b>            | English   |
| <b>Limitation</b>          | Mandatory in the major "Health Services Research"   |
| <b>Exam</b>                | One final examination   |
| <b>Type of exam</b>        | Written examination / 3 Credits   |
| <b>Note</b>                | Requirements for successful completion of the course: - Three written POL assignments (pass/fail): All three need to be passed - Final examination (graded): Grade 4.0 or better  |
| <b>Auditors</b>            | Yes   |
| <b>Contact</b>             | carla.sabariego@unilu.ch  |
| <b>Material</b>            | Teaching material will be provided via the e-learning platform moodle.  |
| <b>Literature</b>          | - Decade of healthy ageing: baseline report. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO. Available online: <a href="https://www.who.int/publications/i/item/9789240017900">https://www.who.int/publications/i/item/9789240017900</a><br>- Integrated care for older people (ICOPE) implementation framework: guidance for systems and services. Geneva: World Health Organization; 2019. Licence: CC BY-NC-SA 3.0 IGO. Available online: <a href="https://www.who.int/publications/i/item/9789241515993">https://www.who.int/publications/i/item/9789241515993</a><br>Further readings will be announced once the course materials are available online.   |

**Introduction to Clinical Rehabilitation Research**

|                     |   |
|---------------------|---|
| Lecturer            | Prof. Dr. sc. nat. Claudio Perret Vanessa Andreina Seijas Bermudez  |
| Type of course      | Lecture   |
| Code                | FS241623  |
| Semester            | Spring semester 2024  |
| Department          | Health Sciences   |
| Study level         | Bachelor  |
| Date                | Tu, 20.02.2024, 14:15 - 16:00, 3.B48<br>Tu, 27.02.2024, 14:15 - 16:00, 3.B48<br>Tu, 05.03.2024, 14:15 - 16:00, 3.B48<br>Tu, 12.03.2024, 14:15 - 16:00, 3.B48<br>Tu, 19.03.2024, 14:15 - 16:00, 3.B48<br>Tu, 26.03.2024, 14:15 - 16:00, 3.B48<br>Tu, 09.04.2024, 14:15 - 16:00, 3.B48<br>Tu, 16.04.2024, 14:15 - 16:00, 3.B48<br>Tu, 23.04.2024, 14:15 - 16:00, 3.B48<br>Tu, 30.04.2024, 14:15 - 16:00, 3.B48<br>Tu, 07.05.2024, 14:15 - 16:00, 3.B48<br>Tu, 14.05.2024, 14:15 - 16:00, 4.B55<br>Tu, 21.05.2024, 14:15 - 16:00, 3.B48<br>Tu, 28.05.2024, 14:15 - 16:00, 3.B48  |
| Duration            | 2 hours per week per semester   |
| Course content      | The course introduces students to the research methods and requirements needed to conduct research in clinical rehabilitation. In addition to the application of common clinical research methods, aspects of regulatory affairs (e.g. ethical application; good clinical practice), and unique challenges of conducting clinical research in rehabilitation will be presented. Examples of recent clinical rehabilitation research will be used to provide a deeper insight into this relevant topic. Furthermore, based on prototype examples, students will be asked to design a basic study and present a poster. In summary, the course should provide the basic knowledge of clinical rehabilitation research to enable students (e.g. for an upcoming bachelor or master thesis) to understand and develop clinical research as well as to improve personal presentation skills of scientific content. A list of the detailed contents can be found at the end of this document. |
| Learning objectives | - Get an introduction to the basic requirements needed to conduct clinical rehabilitation research projects including clinical quality management, good clinical practice and writing ethical applications - Get an overview about potential study designs and research methods in clinical rehabilitation research - Get some insights into currently running clinical rehabilitation research projects - Learn how to set up a clinical research project and how to present in a poster session   |
| Prerequisites       | No special requirements needed. The attendance of the course "Introduction to Clinical Rehabilitation" is recommended but absolutely not mandatory.   |
| Language            | English   |
| Registration        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=721">https://elearning.hsm-unilu.ch/course/view.php?id=721</a>   |
| Exam                | Speech / presentation   |
| Type of exam        | Speech, presentation / 3 Credits  |
| Note                | Teaching methods: Teaching methods include conventional lectures, as well as problem-oriented learning sessions and case studies. In addition, students' oral presentation skills will be challenged by preparing and presenting a poster individually or in a group.   |
| Auditors            | No  |
| Contact             | claudio.perret@unilu.ch   |
| Material            | The usual presentation materials (e.g. ppt presentation) will be used. Presentations and readings will be made available to students on the Moodle platform.  |

**Translational Medicine and Implementation Research**

|                |   |
|----------------|---|
| News           | The session planned for 22 March 2024 will be transformed from a tutorial into a writing exercise. For this session, students will not need to come to the university. Instead, they will be assigned a writing task to complete. More info during the course.  |
| Lecturer       | Prof. Dr Jivko Stoyanov, PhD. EMBA.   |
| Type of course | Master seminar  |
| Code           | FS241046  |
| Semester       | Spring semester 2024  |
| Department     | Health Sciences   |
| Study level    | Master  |
| Date           | Fr, 01.03.2024, 08:15 - 12:00, 4.A05<br>Fr, 08.03.2024, 08:15 - 12:00, 4.B55<br>Fr, 15.03.2024, 08:15 - 12:00, 4.B55<br>Fr, 12.04.2024, 08:15 - 12:00, 4.B55<br>Fr, 19.04.2024, 08:15 - 12:00, 4.B55  |
| Further dates  | This is a core course in the Major "Health Services Research"   |
| Duration       | block course  |
| Frequency      | Every spring semester   |
| Course content | <b>Block 1 Lectures:</b><br><br>L1.1 Translational Medicine: introduction and definition<br>L1.2 Drivers and barriers to Translational Medicine<br>L1.3 Mechanisms and models of disease<br><br><b>Block 1 Tutorial:</b><br><br>T1.1 Case studies and team projects selection<br>T1.2 Review of current literature on the project |

T1.3 Generation of innovative ideas (brainstorming)

T1.4 Presentation and discussion

**Block 2 Lectures:**

L2.1 TM: Targeting and measuring disease

L2.2 Drug development: history and future

**Block 2 Tutorial:**

T2.1 Case studies and team projects further work

T2.2 Group work on the project and presentation

T2.3 Presentation and discussion

**Block 3 Lectures:**

L3.1 TM stakeholders and strategies: policy, regulations and engagement.

L3.2 Interdisciplinary integrative skills

**Block 3 Tutorial:**

T3.1 Case studies and team projects further work

T3.2 Group work on the project and presentation

T3.3 Presentation and discussion

|                            |   |
|----------------------------|---|
| <i>E-learning</i>          | Material is provided online. Please make sure to read the necessary case materials before the lectures, this will ensure everybody in your team is on the same page at the start of the project. The lectures and tutorials are in person.  |
| <i>Learning objectives</i> | The course offers an introduction to Translational medicine (TM). The students will acquire understanding of the basic elements of Translational Research and Medicine and its role in closing the gap between the laboratory bench and patient bedside. They will be able to answer the following questions: What is the purpose of TM? What does it mean to be a practitioner and an expert in TM? What are the tools of TM and how are they used? The students will also get an appreciation of these tools by using them in teams with others - who will have complementary skills and knowledge. The teams will apply the knowledge about TM and its methods and their own expertise to a research problem presented as a case. Each team will be defined in the beginning of the course and stay the same for the whole duration of the course. Each team will present their case work on different aspects of TM at three different stages (end of each block) of the project. |
| <i>Prerequisites</i>       | Engaged participation, effective teamwork, project presentations, and a minimum grade of 4 are essential for course completion.   |
| <i>Language</i>            | English   |
| <i>Limitation</i>          | priority MSc Health Sciences students   |
| <i>Exam</i>                | Group evaluations carry equal weight (33% each). Post-block, teams will discuss their findings. To mirror real-world projects, peer and leadership reviews within teams will influence final grades.  |
| <i>Type of exam</i>        | Written Exam / 3 Credits  |
| <i>Note</i>                | Teaching method(s): A blend of lectures, case study analysis, team collaborations, presentations, and thought-provoking discussions.  |
| <i>Auditors</i>            | No  |
| <i>Contact</i>             | jivko.stoyanov@doz.unilu.ch   |
| <i>Material</i>            | Course materials, encompassing original articles, review papers, and lecture handouts, will be accessible on Moodle one week prior to course commencement. Teams, based on students' backgrounds, will also be pre-announced on Moodle.   |
| <i>Literature</i>          | Reviews, book chapters, cases, original publications.   |

**Health Economics**

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|----------------------------|--|
| <b>Lecturer</b>            | Dr. rer. pol. Renate Susanna Strobl  |
| <b>Type of course</b>      | Master seminar   |
| <b>Code</b>                | FS241029   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Master   |
| <b>Date</b>                | We, 21.02.2024, 12:30 - 14:00, 3.B58<br>We, 28.02.2024, 12:30 - 14:00, 3.B58<br>We, 06.03.2024, 12:30 - 14:00, 3.B58<br>We, 13.03.2024, 12:30 - 14:00, 3.B58<br>We, 20.03.2024, 12:30 - 14:00, 3.B58<br>We, 27.03.2024, 12:30 - 14:00, 3.B58<br>We, 10.04.2024, 12:30 - 14:00, 3.B58<br>We, 17.04.2024, 12:30 - 14:00, 3.B58<br>We, 24.04.2024, 12:30 - 14:00, 3.B58<br>We, 01.05.2024, 12:30 - 14:00, 3.B58<br>We, 08.05.2024, 12:30 - 14:00, 3.B58<br>We, 15.05.2024, 12:30 - 14:00, 3.B58<br>We, 22.05.2024, 12:30 - 14:00, 3.B58<br>We, 29.05.2024, 12:30 - 14:00, 3.B58<br>Tu, 18.06.2024, 08:15 - 09:45, HS 9 (Examination)  |
| <b>Duration</b>            | 2 hours per week per semester  |
| <b>Frequency</b>           | weekly   |
| <b>Course content</b>      | What determines the demand and supply of health care? How do informational problems affect decisions in the health care market? What role does insurance play in the determination of demand and supply? Should governments regulate the health care market? These and other questions will be addressed in this introductory course in health economics. Topics include the demand for health and health care, the supply of health care, health insurance, the economics of health innovation, and public health economics. Economic principles will be applied to analyze current issues in the health system in Switzerland and in other countries, and we will discuss the relevance and limits of health economics to inform health policy and practice. |
| <b>E-learning</b>          | Teaching material is provided via the e-learning platform moodle.  |
| <b>Learning objectives</b> | The objectives of the course are: (i) to apply economic principles to describe and understand the behavior of key actors in the health system, (ii) to assess the functioning of health care markets from an economic perspective, and (iii) to demonstrate how economic analysis can be used to inform decision-making on all levels of the health system.  |
| <b>Prerequisites</b>       | Overall grade of 4.0 or better.  |
| <b>Language</b>            | English  |
| <b>Limitation</b>          | priority MSc Health Sciences students Mandatory for all students in the Major "Health Economics and Policy".   |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=698">https://elearning.hsm-unilu.ch/course/view.php?id=698</a>  |
| <b>Exam</b>                | Final written exam.  |
| <b>Type of exam</b>        | Final written exam / 3 Credits   |
| <b>Note</b>                | The lecture overlaps to a large extent with the Bachelor lecture "Einführung in die Gesundheitsökonomie" (GMF/Strobl) and is therefore not recommended for students who have already taken this course.  |
| <b>Auditors</b>            | Yes  |
| <b>Contact</b>             | renate.strobl@unilu.ch   |
| <b>Material</b>            | Teaching material is based on slides, worksheets, and selected book chapters.  |
| <b>Literature</b>          | Readings for this course are<br>Bhattacharya J, Hyde T, Tu P (2013) Health Economics, Palgrave Macmillan.<br>Folland S, Goodman AC, Stano M (2013) The Economics of Health and Health Care, International Edition, 7e, Pearson.<br>The textbooks are available in the library. In addition, there will be slides for each lecture.   |

**Health and Social Policy**

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| <b>Lecturer</b>            | Ass.-Prof. David Weisstanner   |
| <b>Type of course</b>      | Master seminar   |
| <b>Code</b>                | FS241025   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Master   |
| <b>Date</b>                | Mo, 19.02.2024, 10:15 - 12:00, HS 5<br>Mo, 19.02.2024, 12:30 - 14:00, HS 5<br>Mo, 26.02.2024, 10:15 - 12:00, HS 5<br>Mo, 26.02.2024, 12:30 - 14:00, HS 5<br>Mo, 04.03.2024, 10:15 - 12:00, HS 5<br>Mo, 04.03.2024, 12:30 - 14:00, HS 5<br>Mo, 11.03.2024, 10:15 - 12:00, HS 5<br>Mo, 11.03.2024, 12:30 - 14:00, HS 5<br>Mo, 18.03.2024, 10:15 - 12:00, HS 5<br>Mo, 18.03.2024, 12:30 - 14:00, HS 5<br>Mo, 25.03.2024, 10:15 - 12:00, HS 5<br>Mo, 25.03.2024, 12:30 - 14:00, HS 5<br>Mo, 08.04.2024, 10:15 - 12:00, HS 5<br>Mo, 08.04.2024, 12:30 - 14:00, HS 5<br>Mo, 15.04.2024, 10:15 - 12:00, HS 5<br>Mo, 15.04.2024, 12:30 - 14:00, HS 5<br>Mo, 22.04.2024, 10:15 - 12:00, HS 5<br>Mo, 22.04.2024, 12:30 - 14:00, HS 5<br>Mo, 29.04.2024, 10:15 - 12:00, HS 5<br>Mo, 29.04.2024, 12:30 - 14:00, HS 5<br>Mo, 06.05.2024, 10:15 - 12:00, HS 5<br>Mo, 06.05.2024, 12:30 - 14:00, HS 5<br>Mo, 13.05.2024, 10:15 - 12:00, HS 5<br>Mo, 13.05.2024, 12:30 - 14:00, HS 5<br>Mo, 27.05.2024, 10:15 - 12:00, HS 5<br>Mo, 27.05.2024, 12:30 - 14:00, HS 5<br>Th, 13.06.2024, 08:15 - 09:45, HS 10 (Examination) |
| <b>Duration</b>            | 4 hours per week per semester  |
| <b>Course content</b>      | This course focuses on health systems and policy developments in a comparative perspective. Health care provision is one of the major functions of the welfare state. This course therefore takes an integrated approach, comparing health policy with other social policy areas. After a general introduction on the scope of health policy and different typologies on health systems and welfare states, the course is structured in three parts. Part I explores the determinants of health and social policy, focusing among others on the role of voter preferences, institutions, and the policy process. Part II explores the consequences of health and social policies on health outcomes and health inequalities. Finally, part III explores the politics of health care reform, with a particular focus on policy feedback effects, partisan polarization, and recent developments during the COVID-19 pandemic.   |
| <b>Learning objectives</b> | Students will be able to: • understand, interpret, and review the major concepts, theoretical approaches and contemporary issues in health and social policy development in OECD countries • analyse and compare the field of health policy with other social policy areas (for example, unemployment insurance or pensions) • apply these approaches by analysing empirical data and by planning and implementing their own research project in health and social policy  |
| <b>Prerequisites</b>       | Overall grade of 4.0 or better.  |
| <b>Language</b>            | English  |
| <b>Registration</b>        | <a href="https://elearning.hsm-unilu.ch/course/view.php?id=695">https://elearning.hsm-unilu.ch/course/view.php?id=695</a>  |
| <b>Exam</b>                | - Final written examination (60%) - Group presentation of policy case study (30%) - Class participation (10%)  |
| <b>Type of exam</b>        | Active participation, individual contribution, group presentation, and successful examination / 6 Credits  |
| <b>Note</b>                | Teaching methods: Individual reading, lectures, guest lectures, presentations of students (policy case studies), interactive exercises.  |
| <b>Auditors</b>            | Yes  |
| <b>Contact</b>             | david.weisstanner@unilu.ch   |
| <b>Material</b>            | Teaching material is based on slides, scientific articles and book chapters, exercises, guest lectures, and group presentations of policy case studies. All teaching material is provided via the e-learning platform moodle or is available on internet.  |
| <b>Literature</b>          | Overview literature (indicative):<br>• Freeman, Richard, and Heinz Rothgang. 2010. 'Health'. In The Oxford Handbook of the Welfare State, eds. Francis G. Castles et al. Oxford: Oxford University Press, 367–77.<br>• Immergut, Ellen M. 2021. 'Health Politics Today'. In Health Politics in Europe: A Handbook, eds. Ellen M. Immergut, Karen M. Anderson, Camilla Devitt, and Tamara Popic. Oxford: Oxford University Press, 3–31.<br>• Wendt, Claus. 2022. 'Comparative Research on Health and Health Care'. In Social Policy in Changing European Societies, eds. Kenneth Nelson, Rense Nieuwenhuis, and Mara Yerkes. Cheltenham, UK: Edward Elgar Publishing, 50–65.  |

**Basics of Neuroscience: from brain to cognition**

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|----------------------------|--|
| <b>Lecturer</b>            | Giuseppe Zito  |
| <b>Type of course</b>      | Lecture/Exercise   |
| <b>Code</b>                | FS241404   |
| <b>Semester</b>            | Spring semester 2024   |
| <b>Department</b>          | Health Sciences  |
| <b>Study level</b>         | Bachelor   |
| <b>Date</b>                | Mo, 19.02.2024, 08:15 - 10:00, HS 8<br>Mo, 26.02.2024, 08:15 - 10:00, HS 8<br>Mo, 04.03.2024, 08:15 - 10:00, HS 8<br>Mo, 11.03.2024, 08:15 - 10:00, HS 8<br>Mo, 18.03.2024, 08:15 - 10:00, HS 8<br>Mo, 25.03.2024, 08:15 - 10:00, HS 8<br>Mo, 08.04.2024, 08:15 - 10:00, HS 8<br>Mo, 15.04.2024, 08:15 - 10:00, HS 8<br>Mo, 22.04.2024, 08:15 - 10:00, HS 8<br>Mo, 29.04.2024, 08:15 - 10:00, HS 8<br>Mo, 06.05.2024, 08:15 - 10:00, HS 8<br>Mo, 13.05.2024, 08:15 - 10:00, HS 8<br>Mo, 27.05.2024, 08:15 - 10:00, HS 8<br>Fr, 14.06.2024, 08:15 - 13:00, HS 4 (Examination) |
| <b>Duration</b>            | 2 hours per week per semester  |
| <b>Course content</b>      | <ul style="list-style-type: none"> <li>• Anatomy of the brain, from cortical to subcortical structures</li> <li>• Cognitive functions and their neural correlates</li> <li>• Principles of magnetic resonance imaging</li> </ul>   |
| <b>Learning objectives</b> | • Acquire knowledge on the main brain structures and their functions • Associate brain regions to cognitive functions • Learn the basics of advanced neuroimaging  |
| <b>Language</b>            | English  |
| <b>Limitation</b>          | If you have already successfully completed this course as part of the MSc Health Sciences, it is not possible to complete it twice.  |
| <b>Exam</b>                | • Presentation of a simple project (See 3. Teaching methods) • Pass the oral exam  |
| <b>Type of exam</b>        | Oral Exam / 3 Credits  |
| <b>Note</b>                | Teaching methods: • Front teaching • Work in small groups (2-3 students each) • Carry on a simple project  |
| <b>Auditors</b>            | No   |
| <b>Contact</b>             | giuseppe.zito@doz.unilu.ch   |
| <b>Material</b>            | • Main: teaching slides  |
| <b>Literature</b>          | <ul style="list-style-type: none"> <li>• Main textbook: D Purves, G.J. Augustine, D. Fitzpatrick, W.C. Hall, A-S. Lamantia, J.O. Mcnamara, S.M. Williams. "Neuroscience", Sinauser Associates Inc.</li> <li>• Scientific papers will be cited during the lectures</li> </ul>   |