



COURSE CATALOGUE 2023-2024

2023-2024 | University College Venlo

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General Information

Curriculum Requirements

| | Courses (5 credits each) | Skills courses (2,5 credits each) | Projects (5 credits each) | total (credits) |
|--------------------------------------|--|---|---|---------------------------|
| Core | 4 | 4 compulsory introductory | 2 compulsory introductory | 40 |
| General education | 4, distributed over the alternate concentration and humanities courses. Min 1 HUM Min 1 alternate concentration | | | 20 |
| Concentration (Social / Life) | 14 courses; max 4 introductory min 4 advanced | 6 skills courses; intermediate or advanced | 3 projects; max 2 intermediate min 1 advanced | 100 |
| Capstone | 1 Capstone | | | 20 |
| Total | 22 courses 110 | 10 skills courses 25 | 5 projects + Capstone 45 | 180 |

Disclaimer

The course and skills descriptions provided herein are for the guidance of prospective students of University College Venlo and every effort is made to ensure their accuracy. However, University College Venlo reserves the right to make variations to the content and pre- and co-requisites, to discontinue courses and to merge or combine courses without prior notice. This course catalogue is under continuous development, new courses are added regularly. Suggestions can be proposed to the Education Programme Committee.

Courses per period

| Course Code | Module | Level | Course Title | Period |
|-------------|-----------------|-------|---|--------|
| VCO1001 | Course | 1000 | Modelling Nature | 1 |
| VHU2002 | Course | 2000 | History of Discovery and Innovation | 1 |
| VSC1101 | Course | 1000 | Introduction to Biology | 1 |
| VSC1201 | Course | 1000 | Introduction to Public Health | 1 |
| VSC2205 | Course | 2000 | Nutrition and Metabolism | 1 |
| VSC3101 | Course | 3000 | Gut Microbiology | 1 |
| VSC3203 | Course | 3000 | Food Innovation | 1 |
| VSC3206 | Course | 3000 | Nutritional Pharmacotherapy | 1 |
| VSC3301 | Course | 3000 | Data Mining | 1 |
| VSS1101 | Course | 1000 | Introduction to Psychology | 1 |
| VSS1201 | Course | 1000 | Introduction to Business Administration | 1 |
| VSS2103 | Course | 2000 | Cognitive Psychology | 1 |
| VSS2105 | Course | 2000 | Social Psychology | 1 |
| VSS2204 | Course | 2000 | International Macroeconomics | 1 |
| VSS2206 | Course | 2000 | Supply Chain Management | 1 |
| VSS3501 | Course | 3000 | European Food Law | 1 |
| VSK1001 | Skills Training | 1000 | Introduction to Academic Skills | 1 |
| VSK2001 | Skills Training | 2000 | Argumentation | 1 |
| VSK2002 | Skills Training | 2000 | Lab Skills 2 | 1 |
| VSK2004 | Skills Training | 2000 | Academic Writing | 1 |
| VSK2005 | Skills Training | 2000 | Presentation Skills | 1 |
| VSK2006 | Skills Training | 2000 | Clinical Lab Skills | 1 |
| VLA2000 | Skills Training | 2000 | Language Training | 1 + 2 |
| VCO1004 | Course | 1000 | Globalisation: World Politics and Economics | 2 |
| VHU2001 | Course | 2000 | Sustainability and Social Justice | 2 |
| VSC1303 | Course | 1000 | Introduction to Statistical Methods and Data Analysis | 2 |
| VSC1401 | Course | 1000 | Introduction to Chemistry | 2 |
| VSC2103 | Course | 2000 | Pharmacology and Toxicology | 2 |
| VSC2104 | Course | 2000 | Molecular Biology | 2 |
| VSC2204 | Course | 2000 | Public Health Policy Making | 2 |
| VSC2207 | Course | 2000 | Plant Biology and Agriculture | 2 |
| VSC3102 | Course | 3000 | Healthy Life Cycle | 5 |
| VSC3204 | Course | 3000 | Food Safety | 2 |
| VSC3207 | Course | 3000 | Sports Nutrition and Physiology | 2 |
| VSS2101 | Course | 2000 | Psychology of Eating | 2 |
| VSS2202 | Course | 2000 | Intermediate Microeconomics | 2 |
| VSS3301 | Course | 3000 | Social and Environmental Entrepreneurship | 2 |
| VSK1002 | Skills Training | 1000 | Research Methods I | 2 |
| VSK2003 | Skills Training | 2000 | Lab Skills 3 | 2 |
| VSK2009 | Skills Training | 2000 | Leadership Skills | 2 |
| VSK2010 | Skills Training | 2000 | Creativity & Concept Development of New Business | 2 |
| VSK2012 | Skills Training | 2000 | Integrated Assessment | 2 |
| VPR1003 | Project | 1000 | Research Methods II: Applied Academics | 3 |

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|---------|-----------------|------|--|-------|
| VPR1004 | Project | 1000 | Research Methods II: Lab Skills | 3 |
| VPR2002 | Project | 2000 | Academic Debate | 3 |
| VPR2005 | Project | 2000 | Interviewing | 3 |
| VPR2006 | Project | 2000 | Deep Reading | 3 |
| VPR3002 | Project | 3000 | Think Tank | 3 |
| VPR3004 | Project | 3000 | Project Management | 3 |
| VCO1003 | Course | 1000 | World Orientation: An Introduction to Cultural Studies | 4 |
| VHU1002 | Course | 1000 | Digital Media and Culture | 4 |
| VSC1501 | Course | 1000 | Sustainable Development | 4 |
| VSC2102 | Course | 2000 | Homeostatic Principles | 4 |
| VSC2106 | Course | 2000 | Brain and Action | 4 |
| VSC2201 | Course | 2000 | Epidemiology of Food; The Relationship Between Food and Health | 4 |
| VSC2401 | Course | 2000 | Biochemistry | 4 |
| VSC3201 | Course | 3000 | Clinical Nutrition | 4 |
| VSC3202 | Course | 3000 | Health Education and Communication | 4 |
| VSC3501 | Course | 3000 | Sustainable Food Production | 4 |
| VSS1202 | Course | 1000 | Principles of Economics | 4 |
| VSS2207 | Course | 2000 | Brand Management and how to Communicate about Brands | 4 |
| VSS2701 | Course | 2000 | Culture Politics and Society | 4 |
| VSS3102 | Course | 3000 | Taste | 4 |
| VSS3202 | Course | 3000 | Consumer Behaviour | 4 |
| VSS3203 | Course | 3000 | Services Marketing | 4 |
| VSK1000 | Skills Training | 1000 | The Applied Researcher I | 4 |
| VSK1001 | Skills Training | 1000 | Introduction to Academic Skills | 4 |
| VSK2007 | Skills Training | 2000 | Risk Communication & Crisis Management | 4 |
| VSK2011 | Skills Training | 2000 | Influencing and Negotiation Skills | 4 |
| VSK3101 | Skills Training | 3000 | PEERS - Undergraduate Research I | 4 |
| VLA2000 | Skills Training | 2000 | Language Training | 4 + 5 |
| VCO1002 | Course | 1000 | Philosophy of Science | 5 |
| VHU1001 | Course | 1000 | Ethics | 5 |
| VSC2105 | Course | 2000 | Microbiology | 5 |
| VSC2107 | Course | 2000 | Chronobiology | 5 |
| VSC2202 | Course | 2000 | Food and Disease | 5 |
| VSC2203 | Course | 2000 | Food Technology and Processing | 5 |
| VSC2305 | Course | 2000 | Intermediate Statistical Methods and Data Analysis | 5 |
| VSC3205 | Course | 3000 | Public Health Implementation and Evaluation | 5 |
| VSS1701 | Course | 1000 | Macro Sociology: An Introduction to Human Societies | 5 |
| VSS2102 | Course | 2000 | Behaviour Change | 5 |
| VSS2106 | Course | 2000 | Economic Psychology | 5 |
| VSS2203 | Course | 2000 | Finance and Investments | 5 |
| VSS2301 | Course | 2000 | Entrepreneurship | 5 |
| VSS3101 | Course | 3000 | Performance Psychology in Sports and Business | 5 |
| VSS3206 | Course | 3000 | Operations Management | 5 |
| VSK1002 | Skills Training | 1000 | Research Methods I | 5 |
| VSK1004 | Skills Training | 1000 | The Applied Researcher II | 5 |
| VSK2008 | Skills Training | 2000 | Visualization and Data Storytelling | 5 |

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|---------|-----------------|------|--|----------|
| VSK3004 | Skills Training | 3000 | Digital Professional Communication | 5 |
| VSK3102 | Skills Training | 3000 | PEERS - Undergraduate Research II | 5 |
| VPR1002 | Project | 1000 | The Applied Researcher III | 6 |
| VPR1003 | Project | 1000 | Research Methods II: Applied Academics | 6 |
| VPR1004 | Project | 1000 | Research Methods II: Lab Skills | 6 |
| VPR2001 | Project | 2000 | Writing a Research Proposal | 6 |
| VPR2004 | Project | 2000 | Strategic Marketing and Practice | 6 |
| VPR3003 | Project | 3000 | Science Communication Mini-Documentary | 6 |
| VPR3103 | Project | 3000 | PEERS - Undergraduate Research III | 6 |
| VCA3000 | Bachelor Thesis | 3000 | Capstone | Semester |

Core Courses

VCO1001 Modelling Nature

1000 Core Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Alie Boer, de, University College Venlo, FSE, Maastricht University

Contact: a.deboer@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

This course provides an introduction to theorizing and modelling. It is relevant for a wide range of other courses that are offered at UCV, but it does require some experience in academia. **It is therefore recommended that students take the course in their second or third semester.**

Objectives

Students...

- Will get a broad overview of scientific models and modelling techniques in different disciplines.
- Are shown how to use modelling and models in different academic fields.
- Can apply the new modelling skills by modelling a specific situation, using general models and modelling techniques.

Description of the course

The aim of the course is to familiarise students with model systems within the different disciplines of Sciences and Social Sciences. Models allow us to approach complex questions in systematic ways, for instance, by predicting weather conditions, the patterns of bird flight formations or the results of presidential elections. Such questions are present everywhere and it is through modelling that we can try to find some answers.

Modelling helps us to break down what we are studying into variables, understand relations or correlations between them and even predict the future. The course starts with a short introduction to models, followed by several case studies that illustrate their usefulness in various contexts. Exposing students to models used both in academia and everyday thinking, the course fosters a thorough understanding of natural and social phenomena. Throughout the course, students are encouraged to link models to specific situations and examples from their daily life.

Literature

Jaccard J. and Jacoby J. (2010). Theory Construction and Model-Building Skills – A Practical Guide for Social Scientists, New York: The Guilford Press.

Additional materials (original research articles and relevant knowledge clips) will be made available on Student Portal.

Instructional Format

Lectures and tutorial meetings, two workshops

Assessment

- 50% of grade: Written final exam (open questions, using TestVision when testing online).
- 50% of grade: Written assignment (report with two peer reviews and a response to peer reviews).

VCO1002 Philosophy of Science

1000 Core Course

5 ECTS, Spring Semester, Period 5

Course Coordinators

Remco Havermans, University College Venlo, FSE, Maastricht University

Contact: r.havermans@maastrichtuniversity.nl

Pre-requisites

✓ None

Recommendations

It is strongly recommended not to take the course in your first semester.

Objectives

To familiarize students with the philosophical foundations of scientific method.

Description of the course

This course deals with the question: What is science? We will start with common sense ideas that science is based on observation, and that this is what distinguishes it from other types of belief. From there we will move to more sophisticated positions like critical rationalism, the so-called historical and sociological turn in the theory of science. In the last part of the course we will focus on problems in the social sciences. Typical issues in this course are: what is the role of observation in science? What is a scientific explanation? What roles do theories and experiments play in science? What is the nature of scientific progress? Can we rationally decide between scientific viewpoints? How do the social sciences explain human behaviour? What is the role of social science in society?

Literature

Chalmers, D. (1999). What is This Thing Called Science?
E-Readers.

Instructional Format

Tutorial group meetings and lectures.

Assessment

An essay and a test with open questions.

VCO1003 World Orientation: An Introduction to Cultural Studies

1000 Core Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Connie Drosinou, University College Venlo, FSE, Maastricht University

Contact: connie.drosinou@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

Given the extensive reading load, including many classics, and the required abstract thinking level, it is advised to not take this course in the first 6 months of your study.

Objectives

- You can recall cultural concepts and models relevant to understanding how culture influences our actions and thinking in six different fields of studies (e.g. Kleinman's explanatory model; Douglas grid-group theory).
- You can explain how culture influences our actions and thinking in six different fields of studies (health, food, business, globalization, human rights, and risk perception).
- You can use the theoretical and empirical knowledge retrieved from academic sources to argue for or against a perspective on a current societal issue.
- You can orally discuss a current societal issue in a two person debate using theoretical and empirical knowledge studied in the course.

Description of the course

This course takes an approach that surpasses boundaries between disciplines and methods, problems and perspectives. We will focus on understanding how culture and cultural differences contribute to some of the current problems and phenomena observed in six disciplines (health, food, business, globalization, human rights, and risk perception). In each week of the course we will focus on the relation between culture and one of the six fields. Questions that will be tackled include: What is culture? How does globalization influence culture and identity? Why are some people so persistent in using non-western forms of healing/ treatment within a biomedical treatment dominated country? Is food culture by definition the result of an autonomous shift in consumer views/tastes or can a change in food culture be produced? How can culture explain differences in risk perception?

Literature

An e-reader will be provided which contains numerous literature sources per task.

Instructional Format

Tutorial group meetings, recorded knowledge clips, on-campus lectures, and discussion boards.

Assessment

Online debate (incl. writing a factsheet/template in advance) and final written exam.

VCO1004 Globalisation: World Politics and Economics

1000 Core Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University

Contact: mitchell.kiefer@maastrichtuniversity.nl

Pre-requisites

✓ None

Recommendations

None

Objectives

This course provides students with a basic knowledge on issues related to 'globalization'. It will look at such issues from the perspective of ideas in political philosophy.

Description of the course

In this course students will use ideas from political philosophy to understand issues that are characteristic of our increasingly globalized world. We will study the problem of increasing inequality, and use Rawls' theory of justice to get a handle on that. We will also look at this from the perspective of freedom and the various forms of liberty. Elizabeth Anderson's idea of 'private government' will be used to understand the disparity between freedom and reality for most of society. In a globalized world the old problem of the tragedy of the commons takes on new forms. What can we say about this from the philosophy of property rights? What is the role of the nation state in a globalized world where patterns of migration can upset notions of cultural identity. Where cultures are mixed and mingled, what happens to authenticity? For many today the idea of climate change looms large on the future. What is justice in relation to changes in climate? If future generations have rights, what are these based on? If we want to change the behavior of people (for instance to reduce their environmental footprint), what are the limits of our right to do so? How far can we interfere with their freedom?

Literature

In this course students do not use one textbook. Instead an e-reader will be provided which contains the readings per problem.

Instructional Format

Tutorial group meetings and lectures.

Assessment

A case study report.

A written, open question examination

Humanities Courses

VHU1001 Ethics

1000 Humanities Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University

Contact: mitchell.kiefer@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

Students will:

- Critically analyze the social, economic, and environmental factors that influence the ethical dimensions of scientific research and technological innovation
- Understand key ethical frameworks and apply them to practical concerns and problems of science and technology
- Develop and defend positions regarding the ethics of scientific discoveries, scientific research, and the use of a variety of new and emerging technologies

Description of the course

We live in a fast-paced and ever-changing world in which scientific and technological practices raise many ethical concerns. Building on the theme that science and technology have both beneficial and detrimental aspects, this course explores the ethical dimensions of a multitude of scientific and technological practices and innovations such as food technologies, cloning, genomics, synthetic biology, nanotechnology and big data analyses. We will focus on both current ethical controversies in science and technology as well as long-standing debates. We will ask and discussion questions such as, should research be conducted on animals, and if so, under what conditions? What ethical issues arise as a result of our increasing use of computers? What are scientists' responsibilities regarding risky technologies? To what extent, and how, should the public be involved in scientific practices? Instead of providing easy answers to these questions, this course will provide concepts and theories for thinking about ethical issues systematically and coherently, and for developing justifiable positions about them.

Literature

The Ethics of Invention, by Sheila Jasanoff

Understanding Ethics, by Torbjörn Tännsjö

E-Reader

Instructional Format

PBL format

Assessment

Discussion Posts (10%)

Two Papers (45% each)

VHU1002 Digital Media and Culture

1000 Humanities Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Karin Wenz, Literature & Art, FASoS, Maastricht University

Contact: k.wenz@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

The aims of this course are to familiarize students with topics relevant for digital culture and society such as:

- Different uses of digital media in the fields of work and play, surveillance technologies, mental health and social media and AI and robotics.
- The relation between technological development, user practices, ethical questions, and technomoral change as e.g., netactivism and participation, gendering AI, etrash and sustainability.
- Relevant topics related to digitalization as e.g. ethics, surveillance and privacy will be discussed.

Description of the course

Students in this course will be introduced into the broad field of digital media and culture and discuss in detail computer based practices (both from the humanities and qualitative social sciences). The topics discussed range from transformations in our digital cultures based on technological developments from societal debates to user practices and ethical considerations in the context of new emerging technologies. While popular debates usually focus on general discussions on the impact of digital technologies, this course will deal with the complexity and diversity of our contemporary culture.

Over the course of the past decades digital devices have become omnipresent in our societies. Every day we type on computers, make calls with our mobile phones, log in to numerous websites and social networks. Perhaps more importantly, we are able to keep extensive, precise records of our everyday lives. From internet cookies, tracking apps to video camera surveillance feeds, along with the information users, companies and governments store in clouds, more and more data is generated and archived. In the digital age, information circulates faster and faster, sometimes without the knowledge of the parties from which the data originate. The consequences have been differently valued. The optimistic account stresses the new media's inherent possibilities for active cultural and social participation beyond the reach of existing political or commercial institutions. Participation is a term discussed when we follow discussions about the use of social media to support processes of democratisation.

When we investigate the use and abuse of user data and surveillance strategies both from governments and marketing institutions exploitation of users is central in the debate. We willingly help to spread information on social media, often without an awareness of the politics involved. The cultural transformations of and through digital technologies, the impact they have on their users and ways users shape digital technologies will be investigated in this course.

Literature

The literature is available online and via the reference list of the University Library.

Instructional Format

PBL, tutorial group meetings and lectures, viewing of 2 movies (2 documentaries).

Assessment

Short presentation in class (30%), and a final essay of 2000 (+/- 10%) words at the end of the course (70%). To prepare for the final essay a few feedback moments will be offered (feedback on the topic and research question, feedback on the outline/structure of the essay and a review session for peer feedback and feedback from the coordinator (outlines/drafts to be handed in are not graded).

VHU2001 Sustainability and Social Justice

2000 Humanities Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University

Contact: mitchell.kiefer@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

Through this course, students will:

- Learn to identify key theoretical approaches to studying socio-environmental problems;
- Critically evaluate claims and research regarding environmental justice;
- Apply key concepts to analyze and make sense of environmental problems in every-day life;
- Understand the contingent nature of social responses to environmental problems.

Description of the course

This course will explore the relationship between environmental sustainability and social justice. We will explore the historical development of discourses and actions including but not limited to environmental justice, sustainability, and resilience. Through these theories and discourses, we will explore the possible tension between economic growth and environmental degradation, analyze environmental movements, and evaluate claims made by researchers, activists, and politicians about the connections between environmental harms and social factors such as gender, class, age, and race. To do so, we will make use of a broad range of disciplines, including philosophy, economics, sociology, urban studies, and environmental studies. Specifically, we will look at the social contexts and impacts of environmental problems such as waste management, land use, air quality, flooding, food security, and climate change.

Literature

E-reader

Instructional Format

PBL format

Assessment

Presentation

Final Paper

VHU2002 History of Discovery and Innovation

2000 Humanities Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University

Contact: mitchell.kiefer@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

VCO1002 Philosophy of Science

Objectives

- Identify and analyse key theories and debates in historiography ;
- Understand key historical explanations of scientific and technological change ;
- Interpret primary and secondary historical sources ;
- Apply historiographical insights to analyze the political, cultural, and economic contexts of scientific and technological change

Description of the course

Why do specific people in certain social contexts come up with novel explanations of the world? To what extent does technological change explain historical and scientific progress? How has the nature of discovery changed over the course of history? What determines the consequences of new ideas? How do scientific innovations relate to other societal institutions, such as religion, the economy, and the state? This course will explore these and related questions by analyzing the dynamic relationships between scientific thought, technological innovations, and broader social contexts of religion, art, politics, and morality. We will do this by paying attention to both large, structural changes in scientific institutions as well as micro-histories of particular discoverers and innovators credited with developing new theories, technologies, and ways of thinking. We will cover: medical science in early China; Pacific Islander navigation techniques; the rise of experiments as a basis of knowledge; the contributions of Arabic science to the scientific revolution; developments in knowledge on the age of the earth; the relationship between machines and social class; the role of gender in the making of modern science; and, other related topics. At the same time, we will learn about 'the history of history', or what historians call historiography. With a focus on issues of science and technology, we will cover different approaches to history and discuss how these different approaches afford us different types of understandings of the past. Throughout the course, we will utilize theories and concepts from history and philosophy of science, science and technology studies, cultural studies, historiography, and related disciplines to learn diverse answers to our guiding question: What is the history of scientific and technological change?

Literature

E-Reader consisting of primary and secondary sources

Instructional Format

PBL sessions (two per week)

Assessment

Short Paper: Analysis of the Use of a Primary Source – 25%

Term Paper: (Comparative) Historiographical Analysis – 75%

Life Sciences Courses

VSC1101 Introduction to Biology

1000 (Life) Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Khrystyna Semen, University College Venlo, FSE, Maastricht University

Contact: k.semen@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

Students with a highschool level biology background are advised to contact the coordinator prior to registering for this course.

Objectives

- To gain insight in the basic human biological concepts.
- To gain insight in the structure and function of tissues and organ systems.
- To increase appreciation and knowledge of the science of life.
- To understand the basic concepts of evolution and its mechanisms.
- To provide students with the sound basic knowledge required to enter more detailed courses in life sciences

Description of the course

The Introduction to Biology course offers you a comprehensive view of man as a biological species. This course begins with an introduction to key concepts in biology, from molecular and cellular features to the concept of evolution, including genetics and physiology. The six main topics will be: chemistry and molecules of life; the living cell; genetics; evolution and diversity; structure and function of tissues and organ systems; and human nutrition and digestion.

Literature

- Eric J. Simon, Jean L. Dickey, Jane B. Reece (2015) *Campbell essential biology with physiology* / . – (5th ed.). Boston : Pearson. OR
- Starr, C., Evers, C. A., & Starr, L. (2021). *Biology : today and tomorrow : with physiology* (6e ed.). Cengage.

Instructional Format

Lectures and tutorial group meetings will be organized to deal with the different biology subjects.

Assessment

A group project and a final exam.

This module may be a prerequisite/recommended for:

Homeostatic Principles, Pharmacology and Toxicology, Molecular Biology, Microbiology, Food Technology and Processing, Nutrition and Metabolism, Plant Biology and Agriculture, Clinical Nutrition, Biochemistry

VSC1201 Introduction to Public Health

1000 (Life) Science; Social Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Dennis de Ruijter, Department of Health Promotion, FHML, Maastricht University

Contact: d.deruijter@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- To provide students with knowledge and understanding of what Public Health encompasses; that Public Health can intervene on several ecological levels (individual, interpersonal, organization, community, society); what the main aims of public health are (disease prevention, health protection, health promotion); and how it has developed over the years.
- After this course, students will have gathered experience in the application of their knowledge and understanding about Public Health; they will also have developed basic skills on how to use available evidence to find solutions for a public health problem and on reporting these solutions.
- Learning skills: After this course students will be able to find their way in the available literature, to follow developments in public health in a critical and efficient way, integrate the different professional perspectives and to collaborate in small teams and critically reflect on personal work as well as on the work of others.

Description of the course

Public Health is the multidisciplinary field of research, practice and policy that aims at promoting health and preventing disease. The aim of this course is to provide a vivid view on public health and to provide insight in: its fundamentals, its methods and the organizations involved in public health. Various aspects of public health such as healthy eating will be addressed from an ecological perspective in which we distinguish between individual, family, organizational, community/environmental and global level. You will study the role of public health on every distinct level and ask yourself if public health interventions should be aimed at the individual, the collective or the environment. What is the role of public health for the chronically ill? How can public health target the family? How can we protect/promote health in the occupational setting and what about health, prevention and public health in developing countries? How can we explain socio-economic health differences and does the built environment play a role in public health problems? Further, you will work in small groups on a nutrition-related public health challenge and you report your findings in a report and a mini symposium.

Literature

- Detels, R. , Gulliford, M. , Abdool Karim, Q. , & Tan, C. C. (2021). *Oxford textbook of global public health* (7th edition). <https://doi.org/10.1093/med/9780199661756.001.0001/med-9780199661756>
- Specific literature that is available in an e-reader

Instructional Format

Lectures and tutorial meetings (PBL)

Project activities in teams

Assessment

Paper, exam with open ended questions and mini symposium

This module may be a prerequisite/recommended for:

Public Health Policy Making, Health Education & Communication, Public Health Evaluation, Food Safety

VSC1303 Introduction to Statistical Methods and Data Analysis

1000 (Life) Science; Social Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinators

Miriam Urlings, Food Claims Centre Venlo, Maastricht University

Contact: mje.urlings@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

A mathematical background of at least the VWO (or equivalent) level.

- This module is a prerequisite for follow-up module VSC2305 Intermediate Statistical Methods and Data Analysis
- Knowledge of basic and advanced inferential statistics is a prerequisite for many Dutch Master programmes

Objectives

- To provide students with advanced knowledge basic inferential statistics

Description of the course

This course “Introduction to Statistical Methods and Data Analysis”! This course intends to prepare students to deal with solving problems encountered in research projects, decision making based on data, and general life experiences beyond the classroom and university setting. Students will learn statistical concepts and techniques that play a role in summarizing and describing observed variables, as well as generalizing the statistical results to the entire population.

In the first part of the course the focus is on descriptive statistics, in which students will learn how to summarize observed data. During the second part of the course the focus is on statistical hypothesis testing. Lastly, students will get acquainted with basic statistical techniques that are used to analyze observed data.

Literature

- Andy Fields; Discovering Statistics Using R; Sage Publications Ltd

Instructional Format

Lectures and tutorial meetings

Assessment

- Weekly written assignment
- Final open book exam

This module may be a prerequisite/recommended for:

Intermediate Statistical Methods and Data Analysis, Data Mining

VSC1401 Introduction to Chemistry

1000 (Life) Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Jaap Hanekamp, University College Roosevelt

Contact: hjaap@xs4all.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- To have an understanding of the nature of atoms, their electronic structure and its chemical consequences, and their organization in the periodic table of the elements.
- To have the ability to recognize various classes of chemical compounds and to understand their basic physical and chemical properties.
- To obtain an understanding of the basic physical chemistry of fundamental importance to most natural and chemical processes.
- To be familiar with the essentials chemicals mechanisms of reaction, using a few relevant examples.
- To have sufficient background for further, more advanced, courses in chemistry, biochemistry and the life sciences.

Description of the course

From the battery of our phones, the food we eat, to our very thought processes, every aspect of our lives relies on chemistry. This course introduces some key concepts in organic- and bio-chemistry like. We will discuss topics such as the nature of atoms, their electronic structure its chemical consequences; the most important atomic bonds; important chemical reactions and processes and the chemical and physical conditions in which these reactions occur. This course provides a, hopefully, proper introduction for those who want to study chemistry but will also help students gain a deeper understanding of biological processes.

Literature

Paula Yurkanis Bruice, Organic Chemistry. 8th Edition. 2017. Pearson.

Instructional Format

Lectures and tutorial group meetings

Assessment

Participation, two assignments, final exam

This module may be a prerequisite/recommended for:

Biochemistry

VSC1501 Sustainable Development

1000 (Life) Science; Social Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Maud Huynen, University College Venlo, FSE, Maastricht University

Contact: m.huynen@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- To gain a basic understanding of the (various perspectives on the) concept of sustainable development and some of the main related ideas, concepts and theories.
- To gain insights into (the limits to) our immense global human impact on the earth's systems and the underlying drivers of these unsustainable trends
- To explore ideas about how to achieve a more sustainable society.

Description of the course

Today it is acknowledged that achieving sustainable development at the local, regional and global scale is one of the greatest challenges for the 21st century. But in many cases the term 'sustainable development' functions as little more than a vacuous buzzword. So what does sustainable development actually mean? How unsustainable is our global society at the moment? Are we contributing to irreversible climate change? Are we already passing dangerous global environmental tipping points? Why are humans acting in such unsustainable ways? And, of course, what are sustainable ways forward?

This course aims to enhance student's understanding of 'sustainable development', based on the notion that human development can only be sustainable when environmental boundaries are respected. The course introduces the main concepts, ideas and theories related to the term sustainable development. Students will gain insights into (the limits to) humanity's immense impact on the earth's systems and the underlying drivers of these unsustainable trends. Furthermore, sustainable development requires an understanding that inaction has consequences. Students will explore ideas about how to achieve a more sustainable society. As part of the examination students will link theories/concepts/ideas discussed in the course to a self-selected case study (a promising way forward towards sustainability) in a poster presentation.

Literature

Students are not required to buy a specific book

Instructional Format

Lectures and tutorial meetings

Assessment

Group presentations and written exam.

This module may be a prerequisite/recommended for:

Sustainable Food Production

Social and Environmental Entrepreneurship

VSC2102 Homeostatic Principles

2000 (Life) Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Andries Gilde, Dept. Physiology, FHML, Maastricht University

Contact: a.gilde@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1101 Introduction to Biology

Recommendations

Students should have highschool level knowledge of biology (IB Biology) or follow Introduction to Biology first.

Objectives

- To acquaint students with the different mechanisms for homeostatic control.
- To Provide insight in:
 - Human cellular organization
 - Functional organization of the body
 - Membrane Physiology
 - Cardio-vascular function
 - Skeletal and muscle function
 - Pulmonary ventilation and regulation
 - Kidney function
 - Fluid and electrolyte balance
 - Gastrointestinal fluid resorption and control
 - Neuronal-endocrine regulation

Description of the course

Mathematics is seen as the father of science, Physiology is the mother. Physiology attempts to explain the physical and chemical factors that are responsible for the origin, development, and progression of life. Human physiology investigates the mechanisms of the human body making it a living being (Guyton). In the healthy human body it is of the utmost importance that the working conditions for all cells are kept "constant". In this respect it is noteworthy that essentially all organs and cells of the human body perform functions that help to maintain this constant nature or homeostasis by using feed-back mechanisms. We will begin by discussing the physiology of the cell, and the function of the cell membrane. Continuing, we will discuss cardiovascular physiology, respiratory, fluid and salt balance, followed by the autonomic nervous system and the endocrine system and ending with gastrointestinal physiology, control and feedback. At the end of the course it has become clear to the student that all organ systems in the body maintain homeostasis by a joined effort.

Literature

Multiple sources provided by UM/UCV libraries including textbooks on: Physiology, Biochemistry, Physics, Pathology, Internal Medicine, etc. The use of on-line Study-Tools in Access Medicine (access provided by UB).

Instructional Format

Tutorial meetings and a summarizing lecture

Assessment

Written exam and a presentation on a physiological subject of choice.

This module may be a prerequisite/recommended for:

Sports Nutrition and Physiology, Clinical Nutrition

VSC2103 Pharmacology and Toxicology

2000 (Life) Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Gertjan den Hartog, Department of Pharmacology and Toxicology, FHML, Maastricht University

Contact: gj.denhartog@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1101 Introduction to Biology

Recommendations

Students should have highschool level knowledge of biology or follow Introduction to Biology first.

Objectives

Students can...

- Explain pharmacodynamic, pharmacokinetic and toxicological principles.
- Examine how pharmaceuticals and toxic substances are handled by the body.
- Individually present the appraisal of a case that is related to a specific compound, in which the compound's dynamics and kinetics are analysed and potential solutions to the given case are discussed.

Description of the course

To understand what active compounds, either natural or synthetic, from foods or drugs, can do in the body, you need to understand how these substances act and how the body handles these compounds. Within this course, the principles of actions of bioactive substances (pharmacodynamics) and how the body handles these bioactive substances through the processes of absorption, distribution, metabolism and excretion (pharmacokinetics) will be studied. The principles of toxicology, how toxic substances affect biological systems, will be introduced. You will learn how to use these principles by studying real life cases of using medicinal products and intoxications, and you will analyse a specific case yourself.

Literature

- Rang H.P., Ritter J.M., Flower R.J., Henderson G. (2016). Rang and Dale's Pharmacology (8th ed.), London: Elsevier Churchill Livingstone.
- Timbrell, J.A. (2008) Principles of Biochemical Toxicology (4th ed.), Boca Raton, FL: CRC Press.
- Original research articles.

Instructional Format

Lectures and tutorial meetings

Assessment

- Case presentations
- Written exam

This module may be a prerequisite/recommended for:

Food Safety, Nutritional Pharmacotherapy

VSC2104 Molecular Biology

2000 (Life) Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Herman Popeijus, Human Biology, FHML, Maastricht University

Contact: h.popeijus@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1101 Introduction to Biology or equivalent

Recommendations

Interest in biology at molecular level

Objectives

- To give insight into the basics of molecular biology
- To provide the basics of gene expression and gene control
- To provide the theory behind genetically modified organisms

Description of the course

The general aim of this course is to obtain knowledge about the molecular processes in cell signalling and control of gene expression. Topics include intracellular signalling pathways; chromatin structure and remodelling and finally genetic modifications.

Literature

Molecular Biology of the Cell, Alberts or equivalent books

Instructional Format

Lectures and tutorial meetings

Assessment

Midterm (30%) and end term examination (70%); MCQ and open ended questions

VSC2105 Microbiology

2000 (Life) Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Herman Popeijus, Human Biology, FHML, Maastricht University

Contact: h.popeijus@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1101 Introduction to Biology or equivalent

Recommendations

Interest in microbiology.

Objectives

- To provide students with basic knowledge of bacteria, fungi and viruses
- To give insight into the world of microbes and viruses including a few examples from human perspective

Description of the course

In this course the students obtain basic knowledge of microbiology, i.e. of bacteriology, virology and environmental and applied microbiology. You study the characteristics of a selection of micro-organisms in relation to their related infectious diseases.

Literature

Microbiology: An Introduction, Tortora, Gerard J/Funke, Berdell, R/Case, Christine L, ISBN 9781292099149

Instructional Format

Lectures and tutorial meetings

Assessment

Midterm (30%) and end term examination (70%); MCQ and open ended questions

This module may be a prerequisite/recommended for:

Gut Microbiology

VSC2106 Brain and Action

2000 (Life) Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Khrystyna Semen, University College Venlo, FSE, Maastricht University

Contact: k.semen@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

The course is open for all students, however, a back ground in biology is recommended.

Objectives

- To make students familiar with the basic division, anatomy, and functions of the central and peripheral nervous system.
- To gain knowledge of the workings and anatomy of the brain's most important structures and functions.

Description of the course

Humans mostly go through their lives without paying much attention to their actions such as breathing, eating, and even learning. Our brain seems to take care of us in an almost effortless way by planning, initiating, and executing our actions and by regulating our somatic homeostasis. The course Brain and Action is concerned with exactly how the nervous system does so. The course deals with the scientific study of the central and peripheral nervous system as well as with some of the latest developments in neuroscience. Via problem-based learning tasks, both anatomy and functions of important neurological structures are examined.

Questions that will be raised during the course are, e.g.: How does the brain develop? How do brain cells communicate? How does the brain control our movement? What happens in Alzheimers or Parkinsons disease? How do environmental factors such as light and food impact our brain? Etc.

Literature

Bear, M.F., (2016). Neuroscience: Exploring the brain (4th ed.). ISBN-13: 978-0781778176, scientific articles, online resources.

Instructional Format

Lectures and tutorial meetings

Assessment

A presentation and an exam

This module may be a prerequisite/recommended for:

Performance Psychology in Sports and Business

VSC2107 Chronobiology

2000 (Life) Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Laura Huiberts, Tilburg University

Contact: laura.huiberts@ou.nl

Pre-requisites

- ✓ None

Recommendations

The course is open for all students, however the course has a focus biology so a background in biology is recommended.

Objectives

- Identify what biological rhythms are, describe them through chronobiological nomenclature and interpret usual chronobiological data presentation
- Recognize the factors that influence biological rhythms in organisms
- Explain the underlying molecular and neurobiological mechanism of circadian rhythms in the human body
- Give examples of which human body functions and behaviors are controlled by rhythms
- Explain how rhythms influence many types of human and animal behavior and apply the underlying theory to explain eating behavior and metabolism
- Experience a hands-on recording of own body rhythms in a basic experiment and learn to present the data and link it to scientific literature
- Defend the most important factors determining sleep behavior after performing a recording of your own sleep and analyzing this through comparing it with literature in a scientific report

Description of the course

Rhythms are everywhere. With Earth spinning along its' axes, the moon turning around Earth, and Earth turning around the Sun: organisms are exposed to daily, lunar and seasonal cycles. These cycles have created rhythms at every level of biology. Present in everything from bacteria to plants to humans, ranging from a molecular level to complete behavior. Chronobiology is the scientific field that studies these rhythms; how they work, how they are regulated, how persistent they are, what happens when they are disturbed, how they contribute to health and disease, which behaviors are subjected to them, and more. In this course, these topics will be covered with examples from daily life. The focus will be on the importance of the biological clock: the coordinator of these rhythms. Chronobiology is an interdisciplinary research topic including different model organisms, and an enormous range of involved processes.

Literature

Refinetti, R. (2016). *Circadian Physiology*. (3rd ed.) Boca Raton: CRC Press.

Instructional Format

Lectures and tutorial meetings

Assessment

Participation in class experiment, sleep analysis report, exam.

VSC2201 Epidemiology of Food; The Relationship Between Food and Health

2000 (Life) Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Simone Eussen, Department of Epidemiology, FHML, Maastricht University

Contact: simone.eussen@maastrichtuniversity.nl

Pre-requisites

- ✓ VSK1002 Research Methods I

Recommendations

None

Objectives

- To obtain knowledge on foods and nutrients, and recommended intakes
- To obtain knowledge on different dietary assessment methods
- To gain insight in the relation between diet and risk of important chronic diseases, such as cancer, cardiovascular disease, and mental health disorders

Description of the course

The foods we consume each day contain thousands of specific nutrients and chemicals. Students will be introduced in nutritional epidemiology by lectures, tutorial groups, practical trainings and self study. The course will focus on different methods to measure dietary intake, as well as on the relation of diet with most relevant chronic diseases.

Literature

Willett W. Nutritional Epidemiology. ISBN978 0 19 975403 8.

This material is available in the Reading Room, UM-Library

Additional literature will be provided during the course

Instructional Format

Lectures, tutorial meetings, and practical trainings

Assessment

Critical reflection (30%) and final exam with open questions (70%).

This module may be a prerequisite/recommended for:

Food Innovation, Healthy Life Cycle

VSC2202 Food and Disease

2000 (Life) Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Ellen Blaak, Department of Human Biology, FHML, Maastricht University

Contact: e.blaak@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

Students should have highschool level knowledge of biology or follow Introduction to Biology first.

Basic knowledge on the macronutrients and micronutrients

Basic knowledge on chemistry and biochemistry

Objectives

To gain knowledge and insight in:

- Nutrition (macro and-micronutrients), bioactive substances, anti-oxidants
- Physiology and anatomy of the gastro-intestinal tract
- Intermediary metabolism
- The main diet-related chronic diseases
- Dietary recommendations
- Novel and functional foods and their impact on human metabolism
- Multifactorial problems like obesity and diabetes and cardiometabolic diseases, insight in their etiology
- Impact of lifestyle in the prevention of chronic metabolic diseases (mainly diet), including the role of the gut microbiome, non-caloric sweeteners and precision nutrition
- Basic principles of the measurement of dietary intake, dietary status and energy expenditure

Description of the course

This course covers the basics of normal nutrition for optimal health outcomes and evidence-based diets for a variety of diseases. Participants will learn the fundamentals of nutrition science, how food is digested and stored within the human body and to build upon these to explore the impact of nutrients (macro- and micronutrients) in the prevention of chronic metabolic diseases like obesity, diabetes and cardio-metabolic diseases.

Literature

This literature section only involves basic textbooks, more specific articles will be provided in the course manual.

Basic literature:

- Insel P. - *Nutrition* – 6th edition - Jones and Bartlett publishers
- Hall, J and Guyton A - *Guyton and Hall Textbook of Medical Physiology* – 13th edition
- McArdle W.D., Katch F.I., Katch V.L - *Exercise Physiology: Nutrition, Energy and Human Performance* - 8th edition
- Frayn, Keith N - *Metabolic regulation: a human perspective* – 3rd edition - Wiley-Blackwell Oxford 2010
- Silverthorn, Dee Unlaub - *Human Physiology: An Integrated Approach* – 8th edition - Pearson
- Bray, G.A. & Bouchard, C. - *Handbook of obesity* – 3rd edition

Instructional Format

Lectures and tutorial meetings, practical assignment to o present a metabolic pathway , how this pathway relates to obesity and type 2 diabetes and how it can be modulated by diet

Assessment

Course exam contains 10 open questions and accounts for 75% of end grade. An assignment including the presentation on a metabolic pathway accounts for 25% of the end grade.

This module may be a prerequisite/recommended for:

Healthy Life Cycle, Clinical Nutrition, Food Innovation

VSC2203 Food Technology and Processing

2000 (Life) Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Henk-Jan Meijer, HAS University of Applied Sciences

Contact: H.Meijer@has.nl

Pre-requisites

- ✓ VSC1101 Introduction to Biology

Recommendations

Highschool level knowledge of biology, chemistry and physics

Objectives

Gain knowledge in the background of industrial food production, distribution and retail.

Understanding of food preservation and processing.

To gain knowledge of and comprehension in:

- The safety and shelf life of food products.
- The industrial processing of foods products.
- The functionality of additives used in foods.
- Influence of storage and processing on properties of food.
- Interactions between different components of food.
- How organoleptic and nutritional properties are affected during the processing of raw materials.
- How packaging can contribute to the preservation of food products.

Description of the course

All foods consist of a so-called matrix in which microbial, enzymatic, chemical and physical reactions will occur during shelf life, processing and/or changing ingredients. The matrix is meant as a manner to describe the structure of a specific food that identifies that type of product.

Adding, removing or replacing ingredients usually will have many effect in this matrix and will lead to changes in the quality of the food, such as for example sensory quality, nutritional value, shelf life, price, safety attributes, etc.

This course will also highlight the different processes used in the food industry which also have an impact on the food quality aspect.

Literature

Parker, R., & Pace, M. (2017). Introduction to food science & food systems (2nd ed.). Australia: Cengage Learning.

Instructional Format

Lectures, tutorial meetings, practical work at HAS University of applied sciences and a group assignment

Assessment

Group presentation and report of group assignment, written final exam

This module may be a prerequisite/recommended for:

Food Innovation, Sustainable Food Production

VSC2204 Public Health Policy Making

2000 (Life) Science; Social Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Hans Maarse, Health Services Research, FHML, Maastricht University

Contact: h.maarse@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

VSC1201 Introduction to Public Health

Objectives

- To give students insight into the dynamics of public health policymaking. Key concepts are: policymakers; agenda building; the political construction of health problems; policy beliefs; policy narratives; strategies and impact of interest organizations
- To give students insight into the governance structure of health systems: Key concepts are: governance rules; the problem of collective action; governance gap; anarchy, hierarchy, network; multi-level governance; centralization and decentralization; global governance.
- To give students insight into the moral, rational, conflictual and institutional dimension of public health policymaking. Key concepts: moral dilemmas, the science-policy relationship; uncertainty reduction strategies; power balance; policy as rational choice and negotiated agreement; conflict resolution strategies; institutional continuity and change.

Description of the course

Particularly since the early 19th century state interventions in the field of public health have significantly increased. Examples of state expansion in public health are health laws, health standards on food products, mass vaccination programs, the regulation of the provision and financing of health care and interventions to control the spread of infectious diseases. At the same time, private organizations representing the interests of the food industry, the tobacco industry, the pharmaceutical sector and big tech giants, to mention a few examples, seek to influence and penetrate into the public health field. These developments have contributed to the transformation of public health systems into what they are today: complex systems directed at the protection and promotion of public health with multiple interests that may coincide but also conflict with each other. The general trend points to a continuous extension of control in public health which evokes pertinent questions about the role of science, morality, politics and power in public health policymaking

Literature

- An e-reader with original articles will be available at the start of the course.
- H. Maarse – Health Policy Analysis (e-book)

Instructional Format

Lectures and tutorial meetings

Assessment

- Each student is required to write an individual paper on a self-selected topic regarding the policy and politics of a public health problem (weight: 50%)
- Written test at the end of the course (weight 50%)

VSC2205 Nutrition and Metabolism

2000 (Life) Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Kahlile Youssef Abboud, University College Venlo, FSE, Maastricht University

Contact: k.youssefabboud@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1101 Introduction to Biology or equivalent

Recommendations

VSC2401 Biochemistry

Objectives

After finishing the course, students will be able to:

- Distinguish macronutrients and micronutrients.
- Comprehend digestion and define the role of macronutrients and micronutrients in metabolism.
- Identify and describe the main metabolic pathways and how they are regulated.
- Recognize the different tissues that store substrates and describe how the storage and release of substrates are regulated in fed and fasting states.
- Apply the obtained knowledge to predict metabolic regulation on exercise, diseases and different nutritional status.

Description of the course

Nutrition is a multidisciplinary science that covers the role of food in health and disease. The food we eat directly affects metabolism. Advances in nutritional biochemistry have increased the focus of nutrition on several metabolic pathways in order to improve understanding of how nutrients influences health and the development of diet related diseases. In this course, the student will become familiar with the chemical structure and metabolism of nutrients such as carbohydrates, proteins, lipids, vitamins and minerals. Once they are obtained by diet, the student will be able to comprehend the processes that turn nutrients into available energy and how our body uses the different sources of energy. How fasting and fed states affect metabolism, catabolism and anabolism? The sensation/feeling of satiety is led by the release of a hormone called leptin. What if we have impaired action of leptin? What energy sources do our body use when we are fasted, or just after a meal? In which conditions our adipose tissue becomes a source of energy? All these transformations occurs by the orchestrated action of several hormones and enzymes. These and other functions of our metabolism will be covered by this course. The student will learn how diet, lifestyle and health states can affect our metabolism, physiology and overall health.

Literature

- Ferrier, D. R. (2017). *Biochemistry* (Seventh, Ser. Lippincott illustrated reviews). Wolters Kluwer. Retrieved April 10, 2023, from INSERT-MISSING-URL.
- Kennelly, P. J., Botham, K. M., McGuinness, O. P., Rodwell, V. W., & Weil, P. A. (Eds.). (2023). *Harper's illustrated biochemistry* (32nd ed., Ser. A large medical book). Mcgraw-Hill Education. Retrieved April 10, 2023, from INSERT-MISSING-URL.
- Nelson, D. L., & Cox, M. M. (2013). *Lehninger principles of biochemistry* (6th ed.). Freeman - Macmillan.
- David A. Bender (2004) *Introduction to nutrition and metabolism*. 3rd ed. Taylor & Francis e-Library.
- Original research articles.
- Review articles

Instructional Format

Lectures and tutorial meetings

Assessment

The learning outcomes of this course will be assessed by two means.

- A written final exam (with open and multiple choice questions); and
- An oral presentation.

This module may be a prerequisite/recommended for:

Sports Nutrition and Physiology, Food Innovation

VSC2207 Plant Biology and Agriculture

2000 (Life) Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Carmen Padilla Díaz, University College Venlo, FSE, Maastricht University

Contact: c.padilladiaz@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1101 Introduction to Biology

Recommendations

None

Objectives

- To give insight into the plant kingdom and its significance for mankind, through agriculture and the exploration of natural resources.
- To provide students with a solid understanding of plant evolution, development and function in relation to their environment.
- To acquaint students with crop improvement challenges and methods in the context of sustainable food supply.

Description of the course

During this course you will gain insight in the importance of plants for life on earth and their unique adaptations to their environment. The course will illustrate major aspects of plant evolution, morphology and function. Special attention will be paid to domestication and to the methods by which plants have been adapted for agriculture to function as a major resource for food and beyond. The latter will include an outlook on plant biotechnology and emerging technologies.

Literature

Original research articles.

To be complemented by:

Botany: An introduction to Plant Biology, Seventh Edition James D. Mauseth - ISBN: 9781284157352.

Instructional Format

Lectures and tutorial meetings

Assessment

Case presentation and final exam (open questions and multiple choice)

VSC2305 Intermediate Statistical Methods and Data Analysis

2000 (Life) Science; Social Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinators

Miriam Urlings, Food Claims Centre Venlo, Maastricht University

Contact: mje.urlings@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1303 Introduction to Statistical Methods and Data Analysis

Recommendations

- Knowledge of basic and advanced inferential statistics is a prerequisite for many Dutch Master programmes

Objectives

- To provide students with advanced knowledge on inferential statistics

Description of the course

During “Introduction to Statistical Methods and Data Analysis” students were already made acquainted with the basics of inferential statistic and simple statistical techniques to analyze data. Adding to the statistics learned during the introduction course (period 2), the current course will guide you through intermediate-level statistics. Several methods you will learn about are simple and multiple linear regression, analysis of variance, logistic regression and survival analysis. With these techniques a broad range of statistical analyses of (biomedical) data can be conducted. In addition, you will learn how to apply these topics in statistical software.

Literature

- Andy Fields; Discovering Statistics Using R; Sage Publications Ltd

Instructional Format

Lectures and tutorial meetings

Assessment

- Weekly written assignment
- Final open book exam

This module may be a prerequisite/recommended for:

Data Mining

VSC2401 Biochemistry

2000 (Life) Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Gertjan den Hartog, Department of Pharmacology and Toxicology, FHML, Maastricht University

Contact: gj.denhartog@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1401 Introduction to Chemistry

Recommendations

- VSC1101 Introduction to Biology

Objectives

- To acquaint students with the molecular structure of important biomolecules...
- To provide students with knowledge on reaction mechanisms and kinetics
- To give insight into the mechanisms of enzyme action

Description of the course

This course will review a number of molecular components that make up cells: amino acids and proteins, carbohydrates, nucleotides and nucleic acids, and lipids. In the second half of the course the focus will shift to the description of (bio)chemical reactions, their mechanisms and factors that influence their rate. The final topic of the course will be enzymes and how these proteins speed up essentially all of the thousands of biochemical reactions that take place in the cell.

Literature

Victor W. Rodwell, David A. Bender, Kathleen M. Botham, Peter J. Kennelly, P. Anthony Weil. Harper's Illustrated Biochemistry. (accessible via Access medicine:

<http://accessmedicine.mhmedical.com/book.aspx?bookid=1366>

Bettelheim: Introduction to General Organic and Biochemistry

Also useful: Garrett and Grisham: Biochemistry 5th edition (or newer).

Additional literature will be handed out during the course.

Instructional Format

Lectures and tutorial meetings

Assessment

Presentation

Final test

VSC3101 Gut Microbiology

3000 (Life) Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Koen Venema, Centre for Healthy Eating & Food Innovation, FSE, Maastricht University

Contact: k.venema@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC2105 Microbiology

Recommendations

Not suited for freshmen

Objectives

- To acquaint students with microbiology of the gastrointestinal tract;
- To give insight in the role of the gut microbiota in health and disease;
- To provide students with tools to use the acquired knowledge to develop functional foods that positively modulate the gut microbiota.

Description of the course

This course is a sequel to Microbiology, and focuses on the microorganisms of the intestinal tract, including bacteria, fungi and viruses. It deals both with the microbiome of the healthy gut and on the role of microorganisms in a range of diseases. Furthermore, ways to influence the gut microbiome with food components, amongst which pre- and probiotics, are discussed.

Literature

- 1) Gut microbiome as a clinical tool in gastrointestinal disease management: are we there yet? Quigley EM. *Nat Rev Gastroenterol Hepatol*. 2017 Mar 30. doi: 10.1038/nrgastro.2017.29.;
- 2) special focus issue of Gut Microbes on the impact of diet on gut microbiota composition and function;
- 3) The Human Intestinal Microbiome in Health and Disease. Lynch SV, Pedersen O. *N Engl J Med*. 2016 Dec 15; 375(24):2369-2379.;
- 4) Impact of maternal nutrition in pregnancy and lactation on offspring gut microbial composition and function. Chu DM, Meyer KM, Prince AL, Aagaard KM. *Gut Microbes*. 2016 Nov; 7(6):459-470.;
- 5) Towards microbial fermentation metabolites as markers for health benefits of prebiotics. Verbeke KA, Boobis AR, Chiodini A, Edwards CA, Franck A, Kleerebezem M, Nauta A, Raes J, van Tol EA, Tuohy KM. *Nutr Res Rev*. 2015 Jun;28(1):42-66. doi: 10.1017/S0954422415000037.

Instructional Format

Lectures and tutorial meetings

Assessment

Midterm exam = opinion/review paper; final exam = open questions

VSC3102 Healthy Life Cycle

3000 (Life) Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Karin Lenssen, University College Venlo, FSE, Maastricht University

Contact: karin.lenssen@maastrichtuniversity.nl

Pre-requisites

- ✓ One of the following courses: VSC2201 Epidemiology of Food, VSC2202 Food and Disease, VSC2205 Nutrition and Metabolism, VSC3201 Clinical nutrition, VSC3207 Sports Nutrition and physiology.
- ✓ One of the following courses: VSS2102 Behaviour change, VSS2105 Social Psychology, VSC3202 Health education and communication, VSC3205 Public Health Implementation and Evaluation, VSS3101 Performance psychology in Sports and Business

Recommendations

None

Objectives

- To acquaint students with the notion that many processes (including their interactions) may influence one's health throughout the life cycle
- To provide more in-depth insight into some important processes that underlie an (un)healthy life cycle

Description of the course

Throughout their lives, humans are exposed to various factors that influence their physical and mental health. Some of these factors are detrimental to health while others have important benefits. The course takes an interdisciplinary perspective, focusing not only on biological, but also some psychological and social factors that determine a healthy life – from conception to old age. Examples of questions that will be addressed include: How does psychological stress experienced during pregnancy influence the infant's health as it grows up? Do dietary supplements help us lead longer and healthier lives? Why do we age, and can we slow down the ageing process?

Literature

- Dan Buettner (2008) *The Blue Zones: 9 Lessons for Living Longer From the People Who've Lived the Longest*
- Additional scientific literature provided by fellow students

Instructional Format

Lectures and tutorial meetings; facilitation

Assessment

Task preparations (group assignment), knowledge clip (individual) and final paper (individual)

VSC3201 Clinical Nutrition

3000 (Life) Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Peter Joris, Department of Nutrition & Movement Sciences, FHML, Maastricht University

Contact: p.joris@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1101 Introduction to Biology

Recommendations

VSC2102 Homeostatic Principles, VSC2202 Food and Disease

Objectives

1. To examine the impact of dietary and lifestyle factors on age-related diseases in humans
2. To understand how nutrition prevents diseases by exploring underlying mechanisms
3. To critically evaluate a research article discussing dietary interventions in health/disease
4. To explore how the impact of diet on health can be studied in a metabolic research unit

Description of the course

In this course, the role of dietary and lifestyle factors to prevent age-related diseases in humans will be considered, as well as underlying mechanisms. In addition, it will be addressed how this knowledge can be translated into different forms of dietary support in a clinical setting. Specific attention will be given to a relevant article discussing dietary intervention trials. Examples from real-life situations will be used, while a visit to the research unit in Maastricht will be scheduled.

Literature

- Students are not required to buy a specific book
- Original research articles will be used

Instructional Format

Different instructional formats will be used, including traditional tutorial meetings, a journal club to discuss a research paper, interactive lectures, and a visit to the research unit in Maastricht.

Assessment

- A final written exam consisting of open questions relating to all parts discussed during the course, including the tutorial meetings, journal club, lectures, and research visit.
- A scientific assignment that will be presented and discussed at the end of the course during a special mini-symposium to your fellow-students and the course coordinator.

VSC3202 Health Education and Communication

3000 (Life) Science; Social Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinators

Jeroen Bruinsma, Department of Health Promotion, FHML, Maastricht University

Contact: jeroen.bruinsma@maastrichtuniversity.nl

Nils Keesmekers, Department of Health Promotion, FHML, Maastricht University

Contact: nils.keesmekers@maastrichtuniversity.nl

Pre-requisites

- ✓ VSS2102 Behaviour Change **or**
- ✓ VSS2105 Social Psychology

Recommendations

For this course knowledge of behavior and behaviour-change is required, since it is the core of this course. If your knowledge is limited make an effort to read into these subjects. The Intervention Mapping book includes two chapters (2 and 3) about theories of behavior and the environment that can be of help in this respect.

Having participated in course VSC1201 Introduction to Public Health is beneficial, but not a prerequisite.

Objectives

- To explain the planned and systematic approach to the development of health promoting interventions
- To systematically develop a theory based health promoting intervention
- To integrate creativity in the systematic approach of the development of a health promoting intervention

Description of the course

Unhealthy behavior, such as smoking, drinking too much alcohol and physical inactivity are main causes of avoidable disease and mortality. If you participated in the course Introduction to Public Health, you have seen that public health is influenced by factors at different ecological levels, the individual, interpersonal, organizational, community and public policy level. As a consequence, public health cannot be improved by focusing on a single perspective or discipline. Although your first thoughts may go to education, there are several other ways if you intend to change health related behaviors. For instance changes in the physical environment, the organization of facilities or law and legislation. So, how do you handle it? How can you develop interventions that help the target group to adopt a healthier lifestyle or to adhere to safety regulations at work for instance, taking that complex process of causative relationships into account? These are the kind of questions you will be confronted with and will be supported to find an answer to in this course. Given the broad and multidisciplinary perspective, which may easily lead to confusion, it is important to use a planned and systematic approach in order to maintain a sound overview on the process and to enhance the chance of the design of a coherent and effective program. In this course you will work in small groups and engage in the planned and systematic development of a health promoting intervention. You will have to define the problem, identify the behavioral and environmental factors contributing to the problem, identify the environmental agents and the behavioral determinants of the primary target group and the environmental agents. Subsequently, you will choose methods of change, which you will have to translate into practical applications. Finally you will combine these methods and applications into a coherent health promoting program.

Literature

A copy of the IM book will be available in the UCV library. The book provides all the information that is required to develop, implement and evaluate health promotion programs. This book is not only useful during this course, but also in case you are planning to engage in a Master program that includes studying human behavior. It is also useful as a great reference work for anyone who is professionally involved in behavior change initiatives. Therefore we strongly recommend students who have special interest in the topic of this course to buy the IM book: Planning Health Promotion Programs: An Intervention Mapping Approach, 4th edition (2016) by L. Kay Bartholomew Eldredge, Christina Markham, Robert A.C. Ruiter, Maria E. Fernández, Gerjo Kok, and Guy S. Parcel.

Students need to search for additional literature (using e.g., PubMed, PsycINFO, and Google Scholar) regarding the specific health problem they target with their small group

Instructional Format

Brief lectures

Workshops

Working groups Assessment

Assessment

A presentation of the logic model of the problem, a paper including your intervention plan and a team charter depicting the way you cooperated as a team during the course

VSC3203 Food Innovation

3000 (Life) Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Alvaro Garcia Fuentes, University College Venlo, FSE, Maastricht University

Contact: a.garciafuentes@maastrichtuniversity.nl

Pre-requisites

At least to have taken two of the recommended courses.

Recommendations

Some other courses that could be handy for this course are:

VSC1501 Sustainable Development

VSS2101 Psychology of Eating

VSC2201 Epidemiology of Food

VSC2202 Food and Disease

VSC2203 Food Technology and Processing

VSC2205 Nutrition and Metabolism

VSS3202 Consumer Behaviour

VSC3204 Food Safety

VSC3501 Sustainable Food Production

Objectives

Students can...

- Determine what food innovation entails by recognising food innovations in the market
- Deconstruct in detail the process of food innovation by identifying the factors and drivers to create new food products.
- Outline and justify the steps and decisions that need to be taken to systematically innovate in food by composing a food innovation framework.
- Simulate the use of a food innovation framework by proposing a food product derived from it.

Description of the course

What is food innovation? What is it required to innovate in one of the most competitive industries, yet one with the shortest budgets in R&D?

These are some of the questions that we will analyze in this advanced level course. We will start by clarifying the concept of innovation and how it can be applied to food.

The course focuses on the development of innovative food concepts that are also attractive to consumers. We will work in intensive tasks that will help you to appraise the most important steps for generation of ideas that end up in new food product developments. You will have to make use of your creativity, but also of the knowledge gained to this point during your bachelor to create a food innovation framework that could help you to reproduce the steps to create food products that can be successes in the market and that provides clear benefits to consumers.

Literature

Literature will be based on original research articles. When books are needed, they will be available in the library.

Instructional Format

Workshops, tutorials and lectures, and online activities

Assessment

The assessment will be divided in writing a paper outlining and explaining a food innovation framework, completion of online activities, and possibly a final exam.

VSC3204 Food Safety

3000 (Life) Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Alie Boer, de, University College Venlo, FSE, Maastricht University

Contact: a.deboer@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC2103 Pharmacology and Toxicology **and/or** VSC1201 Introduction to Public Health

Recommendations

None

Objectives

Students can...

- Explain, appraise and prioritise biological and legal food safety concepts
- Analyse physical, biological, chemical and allergenic food safety hazards
- Critically evaluate food safety legislation and its implementation
- Reflect on and discuss the interdisciplinary evaluation (based on nutritional, public health and legal insights) of a given food safety issue and provide science-based recommendations how this specific case can be dealt with

Description of the course

With consumers demanding both safer products and more information about the products they consume, the responsibility of the government and the industry to assure safety of foods is becoming more important. This course focusses on the different aspects concerning safety in all stages of food production and consumption. Therefore safety issues concerning production, storage and distribution of foods as well as the control of these aspects with standards and regulations will be studied. Food safety hazards as contamination and food authenticity and food defense issues will also be addressed.

Literature

Original research articles

Instructional Format

Lectures, site visit or guest lecture and tutorial meetings

Assessment

- Individual paper (40%)
- Individual essay or reflection (25%)
- Debate (35%)

VSC3205 Public Health Implementation and Evaluation

3000 (Life) Science; Social Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Karin Lenssen, University College Venlo, FSE, Maastricht University

Contact: karin.lenssen@maastrichtuniversity.nl

Pre-requisites

- ✓ VSS2102 Behaviour Change or
- ✓ VSS2105 Social Psychology

Recommendations

Having participated in the course VSC1201 Introduction to Public Health and/or VSC3202 Health Education and Communication is beneficial, but not a prerequisite.

Objectives

- To explain theories of implementation and the principles of evaluation
- To identify implementation and evaluation stakeholders
- To integrate knowledge of concepts and theories into a sound implementation plan
- To develop an evaluation plan

Description of the course

The impact of health promoting interventions depends not only on the effectiveness of the program itself, but also on the reach in the population. Programs that have proven to be effective, will have little results if they are never used or have limited use, are used in an improper manner, or when use is discontinued before a health impact has been able to manifest. As a consequence, closing the gap between what we know works and the extent to which it is applied in communities or health settings is a prerequisite for improving population health.

In this course you will be introduced to the theory and practice of implementation and evaluation of health promoting programs. Cooperating in small groups, you will write an implementation and evaluation plan for a specific health intervention. In order to develop this plan you will first gain knowledge and understanding of concepts and theories of implementation and the theory of evaluation. You will also study the context, for which you have to identify the stakeholders and their needs and interests. This analysis will provide you the information to choose appropriate implementation strategies. Furthermore, you will have to develop a thorough understanding of the program and its outcomes, in order to be able to evaluate it.

Literature

The books listed below provide all the information that is required to develop, implement and evaluate health promotion programs. Students are strongly recommended to use these resources:

- Planning Health Promotion Programs: An Intervention Mapping Approach, 4th edition (2016) by L. Kay Bartholomew Eldredge, Christina Markham, Robert A.C. Ruiters, Maria E. Fernández, Gerjo Kok, and Guy S. Parcel. This book is not only useful during this course, but also in the other courses of the Master program and it is a great reference-work for your professional life. (Available on campus)
- Evaluation. A systematic approach, 7th edition (2004) by Peter H. Rossi, Mark W. Lipsey and Howard E. Freeman. (Available on campus)
- Diffusion of innovations, 5th edition (2003) by Rogers, EM. New York: The Free Press. (Available on campus)

Further literature is available through the reference list and indicated in the course manual. Students need to search for additional literature (using e.g., PubMed, PsycINFO, and Google Scholar) regarding the specific topic and setting they target with their small group. A selection of tutorials by the UM Library is available at <http://library.maastrichtuniversity.nl/skills-and-support/> and might also be useful for this course (e.g., tutorials regarding finding your literature and referencing and avoiding plagiarism).

Instructional Format

Lectures and tutorials

Assessment

A presentation of your plan; a paper including your Implementation and Evaluation plan; your peer education session

VSC3206 Nutritional Pharmacotherapy

3000 (Life) Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Koen Verhees, University College Venlo, FSE, Maastricht University

Contact: koen.verhees@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC2103 Pharmacology and Toxicology

Recommendations

None

Objectives

- To give provide knowledge on pharmacotherapy in general for various diseases.
- To give insight in the possibilities to optimise pharmacotherapy with food, dietary components and food supplements.

Description of the course

The course will start with an introduction on the role of reactive oxygen species in chronic diseases. Subsequently, pharmacotherapeutical options for various diseases like cardiovascular diseases (hypertension, heart failure), lung diseases (asthma, COPD, fibrosis, sarcoidosis), liver- and intestinal diseases (NASH, Inflammatory Bowel Disease), cancer, neurodegenerative diseases (Parkinson, Alzheimer, ALS), depression and gout will be discussed during the course. The role of nutrition and nutritional components on the efficacy and safety of the pharmacotherapy will be the common thread running through the course.

Literature

- B. Halliwell and J.M.C. Gutteridge, Free Radicals in Biology and Medicine. 5th Edition. Oxford University Press (2015)
- H. P. Rang, J. M. Ritter, R. J. Flower, and G. Henderson, Rang and Dale's Pharmacology. 8th Edition. Churchill Livingstone, Elsevier (2015)
- Original research articles

Instructional Format

Lectures and tutorials

Assessment

Writing an assignment and a final exam (open questions)

VSC3207 Sports Nutrition and Physiology

3000 (Life) Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Khrystyna Semen, University College Venlo, FSE, Maastricht University

Contact: k.semen@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC2102 Homeostatic Principles

Recommendations

Prior to starting this course, it is recommended to complete one of the following courses: VSC2202 Food and Disease, VSC2205 Nutrition and Metabolism, VSC3201 Clinical Nutrition

Objectives

- To characterize the response to exercise in various organs and systems of a human body
- To understand how training facilitate exercise performance in resistance and endurance athletes;
- To understand how macronutrients maintain energy supply during physical activity;
- To understand the influence of the particular nutrients and dietary strategies on energy metabolism and to elaborate how diet can be used in practice to enhance exercise performance.

Description of the course

“Sports Nutrition and Physiology” is a cross-disciplinary course during which you will learn how the human body reacts to exercise, which adaptations develop with resistance and endurance training, and how nutrition can be used to accommodate sports performance. During the tutorials, responses of the cardiovascular, respiratory and musculoskeletal systems to a single exercise bout will be discussed. Also, the principles of exercise training and training-related adaptations in various organs and systems will be addressed. Students will acquire knowledge on the process of energy transfer which facilitates muscle work during exercise. They will also build an understanding of the dietary strategies and nutritional supplementation which can be used to support energy supply during exercise and, thus, enhance performance in various sports. The knowledge obtained during this course will increase one’s understanding of why a right balance between nutrition and physical activity is needed to ensure optimal health in recreational athletes.

Literature

A combination of basic books and E-reader will be used

Instructional Format

Lectures and tutorial meetings

Assessment

A presentation and a written exam

VSC3301 Data Mining

3000 (Life) Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

TBA

Contact: campusvenlo-osa@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1303 Introduction to Statistical Methods and Data Analysis

Recommendations

- ✓ VSC2305 Intermediate Statistical Methods and Data Analysis

Objectives

- To understand data mining techniques, concepts, and algorithms
- To get hands-on experience with data mining in R
- To learn about common usage scenarios and pitfalls of data mining

Description of the course

Data mining is the process of searching for patterns in data. Data mining has become increasingly important in many areas of science and business, from biomedicine to marketing, due to the increasing ability to generate and store enormous amounts of data.

Data mining makes use of machine learning / artificial intelligence algorithms and statistics, as well as effective use of visualisation techniques and database systems. This course will introduce you to the different aspects of data mining, including

- Data pre-processing and exploration
- Data clustering methods and visualisation
- Data modelling using regression and classification
- Association rule learning

This course will highlight the best practices and common mistakes during the data mining process and provide you with hands-on experience using the popular software program 'R' (www.r-project.org). You will get insights into the theoretical and algorithmic foundations of data mining and its application in real world examples.

Literature

Compulsory: None;

Recommended (online sources):

- 1) Mohammed J. Zaki, Wagner Meira, Jr., Data Mining and Analysis: Fundamental Concepts and Algorithms, Cambridge University Press, May 2014. ISBN: 9780521766333, <http://www.dataminingbook.info/pmwiki.php/Main/BookDownload>;
- 2) Daniel T. Larose, Discovering knowledge in data: An introduction to data mining, John Wiley & Sons, Inc. 2005, Print ISBN: 9780471666578, http://rabiee.iauda.ac.ir/design/iaudaostad/http://rabiee.iauda.ac.ir/my_doc/rabieeiaudaacir/DM/Larose%20-%20Discovering%20knowledge%20in%20data%20-%202005%20.pdf;
- 3) Trevor Hastie, Robert Tibshirani, Jerome Friedman, The elements of statistical learning: Data mining, inference, and prediction, second edition, Springer Series in Statistics, 2009, ISBN: 9780387848587 http://statweb.stanford.edu/~tibs/ElemStatLearn/printings/ESLII_print10.pdf;

- 4) Data Mining Algorithms in R, WikiBooks,
https://en.wikibooks.org/wiki/Data_Mining_Algorithms_In_R

Instructional Format

Lectures, tutorials, and computer practicals (hands-on exercises based on a real-world example using the software program 'R')

Assessment

- A written report about the hands-on datamining tasks during the computer practicals
- A final written open book open questions exam.

VSC3501 Sustainable Food Production

3000 (Life) Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Pim Martens, University College Venlo, FSE, Maastricht University

Contact: p.martens@maastrichtuniversity.nl

Pre-requisites

- ✓ VSC1501 Sustainable Development
- ✓ VSC2203 Food Technology and Processing
- ✓ OR motivation letter with evidence for knowledge on basic sustainability concepts

Recommendations

Our food system is not designed to adapt to major disruptions like climate change and temporary crisis like Covid 19. But, farmers, entrepreneurs, and academics are rethinking food systems to forge a new path forward. Traditional farming methods like permaculture and using native plants on the one hand and new technologies like CRISPR and vertical farming on the other are promising parts of the solution. Changing our eating habits and implementing alternative proteins in global supply chains are big challenges. There are skeptics about each of these different approaches, but the future of a sustainable food system depends on bringing these ideas together.

Objectives

This course addresses the challenge of making our global food production sustainable. After attending the course, students should be able to:

- Identify and evaluate factors along the food supply chain that make the system unsustainable.
- Identify and evaluate concepts that support the sustainable development of food production.
- Expressing and presenting recommendations and active support measures for sustainable development in a target group-oriented manner.

Description of the course

This course assumes a basic understanding of the concept of sustainability and related scientific models. We discuss the situation of today's global food production system and analyze the factors that make it unsustainable. We consider different concepts of changing the structure of the system with a distinction between restructuring and disruption. In addition to the lectures, which provide insights into research projects and subject areas, individual models are discussed week after week. Each course participant chooses their own topic to deepen and explains the underlying sustainability model and an application. In addition to a pitch, a written work and a video are made to spread the topic.

Literature

Mandatory readings :

- Simons L. (2015). Changing the Food Game. Greenleaf Publishing limited.
- Nierenberg D., (2018). Nourished Planet, Sustainability in the global food system, Barilla Center for Food and Nutrition, Island Press.

Recommended books:

- Robertson M. (2017). Sustainability Principles and Practice (2nd.ed.), Routledge.
- De Zwarte I., Candel J. (2020). 10 Miljard Monden. Prometheus Amsterdam.
- Baldwin C.J. (2015). The 10 Principles of Food Industry Sustainability, Wiley Blackwell.
- Collinson P., Young I., Antal L., Macbeth H. (2019). Food and Sustainability in the Twenty-First Century, Berghahn, New York, Oxford.

Original research articles are recommended during the course.

Instructional Format

Lectures and tutorial meetings

Assessment

Pitch of individual topic

Report (paper) of individual topic

Video (presentation) and discussion

Social Sciences Courses

VSS1101 Introduction to Psychology

1000 Social Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Emmy van den Heuvel, University College Venlo, FSE, Maastricht University

Contact: emmy.vandenheuvel@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- You can define what psychology is exactly.
- You can illustrate how psychological concepts (e.g., love, intelligence) can be transformed into something that can be measured and studied.
- You can name, list, and distinguish key ideas within psychology.
- You can explain and reflect on psychological ideas and research.

Description of the course

"It pays to keep an open mind, but not so open your brains fall out." – Carl Sagan

The American Psychological Association (APA) defines psychology as the scientific study of mind and behavior. This course aims to elucidate what the APA means by this. Psychologists wish to understand how and why we think, feel, perceive, and act in a certain way. Psychological research results quite often defy conventional wisdom and insights from psychology have proven useful for other fields such as management and marketing, law and justice, education, and (mental) health. This introductory course will cover topics ranging from the workings of the brain to consciousness, from intelligence to abnormal behavior, and from elementary sensations to idiosyncratic beliefs. It will tackle questions like: Do we have free will? Can we trust our own memory? Are men better in math than women?

Literature

The relevant literature references will be provided through KeyLinks, and are listed in the syllabus.

Instructional Format

Lectures and tutorial meetings.

Assessment

Three writing assignments and a final exam (open/essay questions).

This module may be a prerequisite/recommended for:

Cognitive Psychology, Advertising, Entrepreneurship, Performance Psychology in Sports and Business, Taste

VSS1201 Introduction to Business Administration

1000 Social Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Peter Bollen, Organisation and Strategy, SBE, Maastricht University

Contact: p.bollen@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- To introduce students to topics in business administration. In addition, the course prepares students for courses in marketing, organization, finance, strategy, supply chain management and accounting.

Description of the course

Business administration studies problems within the firm and relates to problems in the fields of marketing and logistics, finance, accounting and information management and organization and strategy. This course introduces students in the various topics that are related to business administration so that students have basic knowledge for the more specialized courses in marketing, organization, finance, strategy, supply chain management and accounting. The integration of the knowledge on these topics will take place by running a management simulation that covers all stages of setting up and running a business (Market place live).

Literature

- E-reader.
- Course material on the Market Place simulation.

Instructional Format

Tutorial group meetings and team work.

Assessment

A midterm test, participation, reflective paper and ranking in the market place management simulation.

This module may be a prerequisite/recommended for:

Advertising, Supply Chain Management, Entrepreneurship, Social and Environmental Entrepreneurship

VSS1202 Principles of Economics

1000 Social Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Stefan Terstiege, Microeconomics & Public Economics, SBE, Maastricht University

Contact: s.terstiege@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

Knowledge of basic mathematical concepts such as solving equations, reading and working with graphs, manipulating inequalities, and elementary calculus.

Objectives

- Learn to think like an economist.
- Introduction to fundamental economic principles, concepts, and models.
- In four special discussion sessions, we will talk about topics such as income inequality, behavioral economics, the economics of climate change, etc.

Description of the course

The undergraduate course Principles of Economics introduces key economic principles and concepts. We will investigate classical economic questions such as: will trade benefit all involved?, when and why can markets fail?, how can governments boost a country's production? Together we will critically examine the answers modern economics provides to these questions.

In addition you will learn how economists look at the world. More than any other social science, (mainstream) economics tries to capture human behavior through mathematical models. You will learn how to use simple mathematical models to describe people's choices and interactions between people. The possibilities and limitations of these models will be debated.

If all goes well you will leave this course with new insights into the many economic and social policy debates which dominate the news on an almost daily basis and a measured appreciation for mathematical models of human behavior.

Literature

Online textbook "The Economy": <https://core-econ.org/the-economy/index.html>

Instructional Format

This course is built around three blocks: lectures, group tutorials, and required readings. All lecture slides are available on Canvas. The purpose of the group tutorials is to deepen your understanding of the course material and to help you learn to apply it to alternative contexts.

Assessment

There are three graded elements in this course

1. participation (in-class participation, hand-in assignments, leading discussion on extra topic)
2. paper assignment
3. final exam

Furthermore, in order to pass the course, you first need to pass the participation requirement. Conditional on having passed the participation requirement, you have to achieve a course grade of at least 5.5. The course grade is determined from your final exam grade, the paper assignment and your participation grade according to the following formula.

Course grade = $0.35 \times (\text{final exam grade}) + 0.30 \times (\text{paper grade}) + 0.35 \times (\text{participation})$

This module may be a prerequisite/recommended for:

International Macroeconomics, Consumer Behaviour

VSS1701 Macro Sociology: An Introduction to Human Societies

1000 Social Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Joeri Bruyninckx, Society Studies, FASoS, Maastricht University

Contact: j.bruyninckx@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

By the end of this course students will be able to:

- Identify the major divisions upon which modern, global, society is organized.
- Be conversant in the sociological concepts, thoughts and theories used to understand and explain these divisions.
- Apply sociological concepts and theories to the study of pertinent social problems.
- Reflect on the relevance and utility of sociology in the 'everyday' world and public policy-making.

Description of the course

The course is an introduction to sociology and focuses on the major divisions upon which modern global society are organized: class and socio-economic status; gender and sexuality; race and ethnicity. This course not only explores the social roots of these divisions, but also introduces you to sociological concepts and theories that allow understanding how these divisions work and why they operate the way they do. Importantly this course is global in its perspective, and expands its boundaries of analysis beyond north-western societies in order to acknowledge and appreciate the interconnection across human societies.

Literature

Ferrante-Wallace, J. (2015). *Sociology: A global perspective* (Ninth edition. ed.). Stamford, CT: Cengage Learning.

Instructional Format

Traditional PBL format using tutorial meetings

Assessment

Participation, writing assignments, final written assignment (paper)

VSS2101 Psychology of Eating

2000 Social Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Emmy van den Heuvel, University College Venlo, FSE, Maastricht University

Contact: emmy.vandenheuvel@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- To provide insight into the various psychological influences on eating behaviour
- To provide insight into how the psychology of eating can be studied
- Critically analyzing in pairs a provided topic related to psychology of eating

Description of the course

Whether we eat, and how much we eat, is not just a mere consequence of the presence or absence of hunger and satiety hormones. Psychological processes too have powerful influences on eating behaviour. During this course, you will learn about a wide variety of these psychological influences. We will cover questions such as: Why do we like certain foods and dislike others? How does our social environment affect our eating behaviour? Why do we eat more from larger plates? How does our brain respond to the sight of tasty food? Why do some people overeat whereas others don't? What are eating disorders?

Literature

Different articles and sources will be provided through KeyLinks, and are listed in the syllabus.

Instructional Format

Lectures and tutorial meetings.

Assessment

A video presentation (assignment in pairs) and a final take-home exam.

This module may be a prerequisite/recommended for:

Taste

VSS2102 Behaviour Change

2000 Social Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Emmy van den Heuvel, University College Venlo, FSE, Maastricht University

Contact: emmy.vandenheuvel@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- You can name and describe various psychological theories of behaviour and motivation.
- You can explain and argue how different theories can be applied to change people's behaviour.
- You can compare and contrast the main theories and ideas regarding behaviour change.
- You can apply theories and ideas to understand behaviour across different domains.

Description of the course

Many people occasionally engage in undesirable behaviours, such as eating too much junk food, stealing other people's food, spending too much time lunching at work, or restrain eating out of fear for weight gain. People are often aware of the potentially negative consequences of these behaviours, but knowledge alone rarely motivates behaviour change. During this course you will learn about how to change health behaviour for the better. We will cover questions such as: Why is it so difficult to change our behavior, despite our best intentions? How can we effectively change unwanted, unhealthy, or psychopathological behaviours? We will look at how individual, social, and environmental factors may contribute to behaviour change.

Literature

The relevant literature references will be provided through KeyLinks, and are listed in the syllabus.

Instructional Format

Lectures and tutorial meetings.

Assessment

An intervention plan report about a potential need for behaviour change, and weekly assignments for every task (writing exam questions).

This module may be a prerequisite/recommended for:

Performance Psychology in Sports and Business

VSS2103 Cognitive Psychology

2000 Social Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

TBA

Contact: campusvenlo-osa@maastrichtuniversity.nl

Pre-requisites

- ✓ VSS1101 Introduction to Psychology

Recommendations

None

Objectives

- To provide students with insights into the foundations of cognitive psychology.
- To acquaint students with various cognitive processes: e.g. perception, attention, learning, memory, thinking, etc.
- To make students familiar with the basic concepts/theories of human information processing and the experimental designs used in cognitive psychology.

Description of the course

Cognitive Psychology is concerned with internal processes involved in making sense of the environment and deciding what action might be appropriate. The present course is concerned with theoretical and empirical perspectives on human cognition and the experimental methods to study cognition and perception. The topics discussed in the course, using a Problem Based Learning format, are amongst others: attention, perception, learning, memory, language, problem solving and reasoning. They will be discussed from different perspectives including experimental cognitive psychology, cognitive neuropsychology, cognitive neuroscience, and computational cognitive science.

Literature

A combination of basic books and E-reader will be used. The relevant literature references are listed in the course manual.

Instructional Format

Lectures and tutorial meetings.

Assessment

mid-term assessment: individual presentation

final assessment: written exam

VSS2105 Social Psychology

2000 Social Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Josine van Diesen, Tilburg School of Social and Behavioral Sciences, Tilburg University

Contact: j.a.y.vandiesen@tilburguniversity.edu

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- You can recall and explain basic social psychological theories and models (e.g. attribution theory; bystander effect) that explain how people's thoughts, feelings, and behaviour are influenced by the implicit or explicit presence of other people.
- You can deduce the relevance of some early experiments or readings (e.g. Sherif et al. (1998); Schachter (1951)) for the development of specific social psychology research areas.
- You can describe a specific social psychological theory and/or model and apply your knowledge about it to examples given to you.
- You can identify and choose academic sources that will give you additional, deeper understanding of a specific social psychological theory/concept beyond the compulsory reading and apply it correctly to example(s) chosen by yourself.
- You can describe orally a social psychological theory and/or model and explain how it relates to current/ everyday life example(s).
- You can demonstrate that you have read and grasped part of the compulsory reading by formulating a new question for your fellow students which requires them to recall, describe and/or comprehend at least two of the compulsory sources.

Description of the course

People do not exist on their own but are inherently social. Within these social structures people influence others and are in their turn influenced by others. There are highly visible forms of influencing other people's behaviour, like talking a friend into going bungee-jumping ("Come on, we will all go, you don't want to spoil this, do you?"). But social influence can also be more covert and can go beyond behavior, involving thoughts and feelings. In this course you study different social psychological concepts, theories and models and you apply them to current examples. Next to reading about classical themes from social psychology, such as conformity and cognitive dissonance, some more recent themes such as prejudices, stereotypes, and the influence of social media on how we (a) present our 'self' to others and (b) the types of social relationships that are formed.

Literature

- Hewstone, M., Stroebe, W., & Jonas, K. (2015). *An introduction to Social Psychology* (6th Ed). Chichester: Wiley. ISBN: 978-1-118-82353-8.
- Also an e-reader containing different academic articles.

Instructional Format

Lectures and tutorial meetings

Assessment

- A written individual assignment that you complete in cooperation with group members
- A group assignment
- A (group) presentation

This module may be a prerequisite/recommended for:

Performance Psychology in Sports and Business

VSS2106 Economic Psychology

2000 Social Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Peter Werner, Department of Microeconomics and Public Economics, SBE, Maastricht University

Contact: p.werner@maastrichtuniversity.nl

Pre-requisites

✓ None

Recommendations

Basic understanding of microeconomics (level comparable to course Principles of Economics), mathematics, and statistics. Advanced level of English.

Objectives

Acquiring a structured insight into the important roles of psychological factors and processes in the judgments, decision-making. Learning about the relations and differences between psychology and economics. Learning about the relevance of the psychological mechanisms behind economic decision-making for law and public policy.

Description of the course

Increasingly, economists are discovering psychology as a means to enrich their models of economic behavior and well-being and to give them a better foundation. The importance of this is illustrated by the fact that Nobelprize winner in economics in 2002 was the distinguished psychologist Daniel Kahneman. He characterizes his research as a quest for the 'logic of the irrational'. Adam Smith already recognized that economic, just like other, behavior is motivated by an intriguing blend of 'rational' considerations and 'irrational' sentiments. The great challenge is to investigate the implications of the latter motives for economics.

This course aims to give an intensive introduction into this field. The first sessions will provide an overview of the psychology of judgment and decision making. Basic principles of rationality are compared with actual behavior in making decisions. There are important discrepancies between rational and actual behavior that are due not to random errors or mistakes but due to automatic and deliberate thought processes. These processes influence how decision problems are conceptualized and how future possibilities in life are evaluated. The latter sessions will be dedicated to further applications of how psychologic mechanisms influence economic decision-making in the field and their relevance for law and public policy.

Literature

TBA

Instructional Format

Lectures and tutorial meetings (PBL).

Assesment

Presentations, session summaries and final paper.

This module may be a prerequisite/recommended for:

Performance Psychology in Sports and Business

VSS2202 Intermediate Microeconomics

2000 Social Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Andy Mackenzie, Microeconomics and Public Economics, SBE, Maastricht University

Contact: a.mackenzie@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

Statistics 1/Introduction to Statistical Methods and Data Analysis (Quantitative Methods) and Principles of Economics. Students taking this course should be prepared to use and manipulate basic mathematical expressions. A good knowledge of the analysis of common functions and their derivatives will be an asset for the course.

Objectives

- To introduce students to the basics of microeconomic theory.
- To acquire skills in applying its analytical tools to real-life economic problems.

Description of the course

Economists study the production and allocation of scarce resources, and one of their primary tools for doing so is microeconomic analysis. This methodology starts from the idea that, within a given institutional framework, economic outcomes are the product of choices made by many different individuals. With the micro approach, economists first study individual decisions, then study how these decisions collectively lead to broader outcomes in society.

In this course, you will be provided with tools to perform this kind of analysis, with an emphasis on the analysis of markets. For example, we will work closely with mathematical models of how consumers and producers respond to prices, as well as models of which prices they may face—both when the market is competitive and when it is not. We will also consider several criteria for comparing economic outcomes, and use them to assess various kinds of market regulations.

Ultimately, this is a course about techniques. The purpose of this course is not to provide you with answers to questions of economic policy, but rather with the techniques to rigorously form your own questions and answers.

Literature

The primary textbook for the course is:

- Varian, H. (2009). *Intermediate Microeconomics: A Modern Approach* (Eighth Edition). New York, NY: W.W. Norton & Company.

OR

- Varian, H. (2014). *Intermediate Microeconomics: A Modern Approach* (Ninth Edition). New York, NY: W.W. Norton & Company.

Note that reading instructions are provided for both editions

Instructional Format

There will be two regular, weekly tutorial group meetings.

Assessment

In order to pass the course students have to receive a passing participation grade, successfully complete a presentation and a final exam. If those requirements are satisfied the course grade is computed as follows:
Course Grade = $0.3 * \text{Participation} + 0.2 * \text{Presentation} + 0.5 * \text{Exam}$

VSS2203 Finance and Investments

2000 Social Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Sjoke Merk, Finance, SBE, Maastricht University

Contact: j.merk@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- To understand how to invest
- To understand and apply the basic valuation tools
- To analyse financial articles published in newspapers like Financial Times, the Wall Street Journal, Bloomberg, and the Economist
- To be aware of the main developments in the world of finance and the financial markets, i.e. fintech and cryptocurrencies
- To think logically and analytically, apply mathematical techniques to a variety of problems, and critically evaluate these techniques by means of discussing real-life cases

Description of the course

Always wondered on how to make investment decisions, i.e. how to make money? This course will answer this question by introducing the theories, techniques, and strategies of investment management, with an emphasis on the global context of investment decisions. As you might know, today's business environment is more complicated than ever. This is illustrated by the recent financial crises and social-cultural, geopolitical & macro-economic developments that increasingly affect corporate decision making, e.g. Brexit, trade-wars, and global political tensions. Corporate finance deals with the investment and finance decisions made by the management of companies in the pursuit of profit maximization. A company can finance its investments by means of borrowing money from banks, by issuing bonds and/or through the stock market. The course explores aspects of corporate finance, examining how companies interact with the financial markets and how managers' decisions affect the value of their company's shares, bonds, etc. These types of decisions influence the expected return and risk of the company. The course gives a broad overview of important issues in corporate finance and combines insights from economics, business, and psychology. The economic side of corporate finance deals with the maximization of shareholder wealth. To this end managers aim at securing the greatest possible return in exchange for accepting the smallest amount of risk. The course is largely based on real life cases that we discuss in an interactive manner. To conclude, the goal of this course is to develop financial skills for making corporate and personal investment and financing decisions. Topics include discounted cash flow and other valuation techniques; risk and return; capital asset pricing model; corporate capital structure and financial policy; capital budgeting; and other exotic investment vehicles like cryptocurrencies, stock options, etc.

Literature

- Berk & De Marzo, Corporate Finance, Pearson Prentice Hall

Instructional Format

PBL, lectures, and tutorial meetings

Assessment

Midterm exam, final case, and participation

VSS2204 International Macroeconomics

2000 Social Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Tania Treibich, Macro, International & Labour Economics, SBE, Maastricht University

Contact: t.treibich@maastrichtuniversity.nl

Pre-requisites

- ✓ VSS1202 Principles of Economics

Recommendations

None

Objectives

- Learn how to analyze international trade, capital flows and exchange rates
- Learn how to interpret and understand various types of economic policies in an international context
- Understand current discussions about developments in international relations

Description of the course

This course provides a detailed insight into global economic issues. The course starts with an analysis of the determination of exchange rates. After this, the course addresses a number of issues in open macroeconomics, including the working of monetary and fiscal policy, and the economics of the euro. This background will be used to discuss and to critically evaluate current developments in the world economy, such as the current crisis, globalization, monetary and fiscal policy in the euro zone and whether China should appreciate its yuan or not.

Literature

- International Macroeconomics, by Rob Feenstra and Alan Taylor (4th edition)

Instructional Format

PBL

Assessment

Final exam, presentation

VSS2206 Supply Chain Management

2000 Social Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Dr. ir. Pauline van Beusekom, Department of Marketing and Supply Chain Management, SBE, Maastricht University

Contact: p.vanbeusekom@maastrichtuniversity.nl

Pre-requisites

✓ None

Recommendations

None

Objectives

Students understand core supply chain concepts and theories and use them in relation to the wider business environment. Students can solve practical problems using tools and techniques, and interpret the outcome to advice on collaborations in supply chains. Students learn to analyse ethical and sustainable issues in supply chains that affect their daily lives and make choices to reflect these considerations.

Description of the course

This course is an introduction course into supply chain management, in particular we will focus on how supply chains in for example the food, fashion and health care industry are designed. Students will acquire a solid foundation in the topics of both logistics management and supply chain management. While a strong internal operations function is vital to a firm's survival, it is not sufficient. Firms must also understand how they link with their supply chain partners, including customers, distributors, manufacturers, and suppliers. In this course, we will cover a wide range of topics such as supply chain strategy, collaboration, purchasing, logistics, inventory, ethics and sustainability. Students learn directly about these concepts from a textbook and application to cases and exercises, and additionally work on a team project to analyse a part of a supply chain.

Literature

Christopher, M. (2022). *Logistics & supply chain management*. Sixth edition. Pearson UK. ISBN: 978-1292416182

Instructional Format

Lectures and tutorial meetings

Assessment

Group project, Participation, and Individual assignment.

VSS2207 Brand Management and how to Communicate about Brands

2000 Social Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Tim Döring, Marketing and Supply Chain Management, SBE, Maastricht University

Contact: tim.doring@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

VSS1101 Introduction to Psychology or VSS1201 Introduction to Business Administration

Objectives

- Students acquire a basic insight into what brand management and integrated marketing communications (including advertising) entails from a strong consumer based perspective (consumer behavior and consumer psychology).
- Through working on different team assignments students become acquainted with applying the learned theory and knowledge to a real-life brand.
- Next to content knowledge, the assignments allow students to enhance some of their transferable skills: presentation skills, teamwork skills, writing skills, analytical skills, reflection skills and creativity skills.

Description of the course

“As I woke up this morning and stumbled to the bathroom to refresh, I barely noticed the brand of toothbrush and toothpaste I used. I couldn’t escape the brand of breakfast cereal though, because it screamed at me in huge typeface to enjoy my “coco-pops”...On my way to the train station I passed numerous signs, billboards and shop windows...It was only 8.00 am, but by now I had been exposed to over 250 commercial messages ranging from brand names and packaging to billboards, television ads and sponsored events. And of course, none of these messages had in any way affected me...” (Fennis, 2010, p. 2).

We are surrounded by countless brand and marketing messages. In this course, we cover the foundations of brand management and integrated marketing communications (IMC). You will learn to analyze brands from a consumer-based perspective. You will apply the acquired knowledge to a chosen brand in team assignments. The course consists of two major parts. The first part addresses brand management. Here we learn about the nature of brands in consumers’ minds, the concept of brand equity, and which instruments can be used to build and leverage brands. In the second half of the course, we will focus on integrated marketing communications by exploring theories of consumer behavior and response to advertising and media.

Literature

No obligatory book but E-reader in reference list

Instructional Format

In this course three instructional formats are used: most tutorial meetings follow the traditional PBL format where students engage in post-literature discussions. For some meetings, an hour is dedicated to team presentations. Small groups of students (2-3 students) present to their peers how one can apply the studied theory and knowledge to a brand. For the purpose of each specific team assignments, students will receive guidelines from the course coordinator. As there will be insufficient time during these 4 meetings

to have a pre-discussion of the next task, the coordinator will provide the students with discussion questions that they can use to guide their self-study and the post-discussion during the next meeting. Lastly, two theoretical lectures will be provided, which might be supplemented by two guest lectures, in which two individuals working in the business field talk about brand communication in the real-world

Assessment

This course does not encompass a final written exam, but a final team assignment (presentation). The final grade is composed of (1) participation grade (2) several team assignments (presentations), (3) individual mid-term paper, and (4) the final team assignment (IMC Plan presentation).

VSS2301 Entrepreneurship

2000 Social Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Martin Carree, Organisation, Strategy and Entrepreneurship, SBE, Maastricht University

Contact: m.carree@maastrichtuniversity.nl

Pre-requisites

VSS1101 Introduction to Psychology *or* VSS1201 Introduction to Business Administration *or* VSS1202 Principles of Economics

Recommendations

None

Objectives

- You are able to explain and illustrate the unique qualities of the entrepreneurial process.
- You are able to explain and illustrate the unique qualities of entrepreneurs.
- You are able to explain how entrepreneurial opportunities are discovered and created.
- You are able to explain how entrepreneurship is related to economic development.
- You are able to explain how entrepreneurs link value creation to value appropriation.

Description of the course

In this course you will be introduced to some of the key insights on entrepreneurship that academics in the social sciences have produced. You will search the literature to unravel what drives entrepreneurs and the entrepreneurial process. We will focus on new venture gestation: the initial stages of the process that may result in a new company to emerge. Throughout the course you will explore how entrepreneurs not only rely on generic business management principles, but also how they cope with the uncertainty, risk, scarcity of time, capital and other resources that is inherent to all entrepreneurial venturing. Perhaps you will conclude that many entrepreneurs are in fact not really good managers (good entrepreneurs will compensate for this by hiring better managers). We start the course by explore the process dynamics of entrepreneurial activity and the importance of entrepreneurship for the society/economy. We then will explore the origins of entrepreneurial opportunity, review how entrepreneurs screen and develop the opportunities that they discover, and you will unravel how entrepreneurs seek to appropriate the returns from their enterprising behaviour. You will learn that entrepreneurship is quite distinctive from "management." It is also a phenomenon that is studied by many disciplines. Sociologist, psychologists, economists (working inside and outside business schools) have studied entrepreneurship, and their findings provide an important intellectual foundation to this course (and to entrepreneurial practise). Perhaps surprisingly, in most economic theory the entrepreneur is neglected. However, several economists have pointed to the increasingly important role of entrepreneurs in modern economies. It is not a course in which you prepare the start of a new venture. Nevertheless, you may expect the course to inspire you to start exploring opportunities that you could pursue next to, or after your studies.

Literature

We provide a list of suggested scholarly articles that can be used in this course. All readings can be obtained free of charge through the UM library or from the authors' websites.

Instructional Format

Tutor Group sessions will help you explore the relevant literature and to learn how scholarly findings can help you to explain, understand and/or predict enterprising behaviour. Case discussions will help you to

explore how (well established and more recent) scholarly insights can be used to inform entrepreneurial decision-making.

In addition to the literature and case discussions, you will execute a biography project in which you (individually) read and reflect on a biography of a "true" entrepreneur. There is a group project on a business opportunity in some country/region resulting into a group presentation.

Assessment

Take home assignment plus biography essay plus group presentation plus participation/cases. Biography essay: Each student is to read a biography of a "true" entrepreneur. In the essay you critically reflect on the entrepreneurship journey that is presented in the biography. You are expected to draw on the literature studied for the tutorials to put the journey into perspective.

This module may be a prerequisite/recommended for:

Social and Environmental Entrepreneurship

VSS2701 Culture Politics and Society

2000 Social Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Jo Wachelder, History, FASoS, Maastricht University

Contact: jo.wachelder@maastrichtuniversity.nl

Pre-requisites

✓ None

Recommendations

None

Objectives

This course acquaints you with topical cultural and societal theories, addressing challenges in current politics and economics. Transformations in consumption will be the central recurring issue, combining historical developments with contemporary challenges, connecting the global with the local.

Description of the course

The course aims to explore the triangle of culture, politics and society via an historical and systematic analysis of consumption. This requires taking insights from history, sociology, economics, political science, philosophy, law and cultural studies on board. Consumption, more specifically the consumption of food, serves as the course's strategic case into the broad topic of societal change. Food is a necessity throughout history. Consumption is a significant feature of modern, capitalist societies. Via global trade and taxation, consumption is connected to both politics and legal regulation. Regulation, however, entails more aspects; think, for instance, of quality control. Culture comes in, among others, via different consumption patterns, which can be influenced by tradition, locality, knowledge, marketing or artistic representations. This interdisciplinary course integrates insights and approaches from historians, sociologists, economists, political scientists, anthropologists and philosophers. It aims to increase understanding societies, in their current socio-political and cultural settings. Participating in this course will not only enrich your knowledge about consumption, but also extend your competences in dealing with and combining different disciplines.

Literature

TBA

Instructional Format

PBL and lectures

Assessment

Mid-term research presentation and final paper

VSS3101 Performance Psychology in Sports and Business

3000 Social Science Course

5 ECTS, Spring Semester, Period 5

Course Coordinator

Dimona Bartelet, Open Universiteit

Contact: dimona.bartelet@ou.nl

Pre-requisites

One psychology course at the bachelor level or in possession of a waiver (also see recommended).

Recommendations

If you want to be eligible for a waiver, you should be highly motivated to follow this course and willing to put in extra effort

Objectives

After this course

- you are able to argue why and when a certain career or role should be classified as high performance field.
- you are able to explain psychological concepts, ideas and theories relevant to the study of performance psychology.
- you are able to support your view on a given performance psychology question/issue using relevant psychological concepts, ideas and theories obtained from academic sources.
- you are able to critique points made/arguments provided on a given performance psychology question/issue.
- you are able to demonstrate how psychological concepts, ideas and theories can explain performance in real-life.
- you are able to hypothesize/question why a performance situation/observation occurred or did not occur using psychological concepts, ideas and theories.

Description of the course

“Success is a journey, not a destination” (Arthur Ashe)

In this course students increase their insight on how people increase their mental toughness and overcome problems that impede them from performing at their best. They will become acquainted with some of the psychological processes and skills that are associated with people’s ability to tap into their potential. Specific topics covered will focus on psychological factors and skills on the individual level. Topics studied will include mental imagery, focusing, confidence, coping with anxiety and setbacks, and the psychology behind the use of performance enhancing drugs. While most of the examples in the course manual to illustrate the concepts and trigger discussion come from the sport or business field, there is ample of room in the course to apply the gathered knowledge to other areas requiring people to perform (e.g. rehabilitation/ patients; emergency careers (such as first-aid doctors, fire fighters), education etc... Students will have vast opportunities to decide on what they want to learn about the performance psychological concepts/theories introduced in the course.

Literature

Some articles will be provided. However, the majority of articles have to be searched and selected by students themselves.

Instructional Format

Tutorial meetings, recorded and on-campus lectures

Assessment

Assessments are scheduled during two moments (half-way and at the end):

- Having a Panel-discussion (half-way)
- Writing a brief Critical Review (half-way)
- Writing a mid-week Performance Psychology blog (individual assignment) (at the end)

VSS3102 Taste

3000 (Life) Science; Social Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Remco Havermans, University College Venlo, FSE, Maastricht University

Contact: r.havermans@maastrichtuniversity.nl

Pre-requisites

- ✓ VSS2101 Psychology of Eating

Recommendations

VSS1101 Introduction to Psychology

Objectives

- You can name and identify anatomical structures and their functions regarding taste and smell perception.
- You can describe and explain the causes and consequences of taste and smell dysfunction.
- You can understand and apply techniques measuring how well anyone can taste or smell.
- You can explain how and why certain environmental cues influence flavour perception.
- You can reflect on how sight, touch, and hearing contribute to one's overall experience of flavour.
- You can argue and explain how learning and memory determine the development of flavour likes and dislikes.

Description of the course

This course covers the latest insights in the psychology of the sense of taste. Through problem-based learning tasks and portfolio workshops, we examine the sense of taste and how it relates to food selection and intake. Various topics will be addressed, such as the importance of integrated gustation and olfaction in taste perception, the dynamics of taste acuity, the consequences of taste changes, taste disorders and their impact on psychological well-being, and the role of memory and context in taste perception.

Literature

No compulsory literature

Instructional Format

Lectures and tutorial meetings

Assessment

A portfolio containing a variety of assignments pertaining to different formats of science communication (e.g., blog, podcast, infographic, social media stories or essay) and a midterm written assignment reflecting on all the topics covered in the course.

VSS3202 Consumer Behaviour

3000 Social Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Matthias Wibrals, General Economics, SBE, Maastricht University

Contact: m.wibrals@maastrichtuniversity.nl

Pre-requisites

- ✓ none

Recommendations

VSS1202 Principles of Economics or VSS2202 Intermediate Microeconomics

Objectives

- Learn to use theories from (behavioural) economics, marketing and psychology to understand and predict people's choices
- Understand how companies and governments can use these theories to reach their desired goals
- Become acquainted with empirical methods used to identify the behaviour and preferences of consumers

Description of the course

In this course we explore how consumers make decisions and how companies and governments use that information. We will explore, among other things, how people decide which insurances to buy – if any, how consumers deal with decisions that have consequences over time, and how we can stimulate ethical consumption. After the course you can explain, why are there so many brands of toothpaste, why cellphone plans are so complicated, why you are obliged to buy medical insurance, why people say they will buy Fairtrade products, but don't, and more. In addition to theories and empirical findings we will also discuss the empirical methods used to investigate these questions.

Literature

No book, papers will be assigned.

Instructional Format

Lectures and tutorials

Assessment

Participation including presentations and a final paper.

VSS3203 Services Marketing

3000 Social Science Course

5 ECTS, Spring Semester, Period 4

Course Coordinator

Tim Hilken, Department of Marketing & Supply Chain Management, SBE, Maastricht University

Contact: t.hilken@maastrichtuniversity.nl

Pre-requisites

- ✓ At least two courses in the Social Sciences

Recommendations

None

Objectives

The general objective of this course is to introduce the different characteristics of services and their particular consequences for marketing. On the one hand, this will be accomplished by studying the literature (the course textbook and selected articles). On the other hand, a major emphasis will be placed on presentations in which teams of participants are expected to lead the discussion on various service marketing themes and real-life cases. In addition, students will work in teams on a real-life services marketing project. By these means, students should obtain an in-depth insight into the literature on the marketing of services and at the same time develop a (hands-on) feeling for conducting research in this area. Would-be participants should be aware of the fact that this course requires a considerable amount of planning, effort, and inventiveness.

Description of the course

Much of the economy in the developed world is dominated by the production and consumption of services. For example, in the US, current statistics show that approximately 75% of the work force is involved in the services industry. Additionally, 45% of an average US family's budget is spent on services, and for Europe statistics are similar. In many developing nations services are considered a way to expand and stimulate economic growth and development. Consistent with economic growth comes a growth in services employment. While most business schools focus on the manufacturing segment of the economy, given these facts it seems imperative to study the marketing of services in a separate course. Three kinds of services will form the central focus of this course: (1) Services which are offered by organizations in the service-sector (banks, assurance and transport companies, the hotel and catering industry, health care and the tourist industry, among others), (2) Services which are offered by companies that manufacture products. In this context services refer mostly to the so-called "after-sales service" (repair services, service engineers, etc.) but also (product) instructions accompanying a sale, and (3) a specific focus on the online context of social media, virtual communities, Twitter etc. as these hold promising potential for service delivery and as they form a new frontier for both practitioners as well as researchers.

Service organisations vary, from restaurants, hotels and car rental agencies to financial services and even education. These organisations require a distinctive approach to marketing strategy. We will build on the principle of marketing and expand into very specific themes covering the entire spectrum of services, seen through many angles and illustrated by relevant case studies. In the course we will explore methods, based on academic research, in which firms can use service as a unique selling proposition. We have designed this course to address the unique needs and challenges in this ever-changing aspect of marketing, including the dynamic and rapidly developing area of electronic and mobile services. Throughout the course emphasis will be placed more specifically on issues related to marketing management and customer perceptions. Thus, a number of presentation topics need to be researched both in a theoretical and a

practical manner in addition to the discussion of a number of tasks. Moreover, to enhance understanding of the course concepts, several elaborate cases will be discussed and student teams will complete a real-life services marketing project

Literature

Wilson, Zeithaml, Bitner & Gremler, 2021, Services Marketing, 4rd Edition, McGraw Hill Education, ISBN 10 1526847809

Instructional Format

Problem Based Learning Tutorials and Services Marketing Project

Assessment

Individual and Team Participation, Services Marketing Project, Individual Written Exam

VSS3301 Social and Environmental Entrepreneurship

3000 Social Science Course

5 ECTS, Fall Semester, Period 2

Course Coordinator

Abel Diaz Gonzalez, Organisation, Strategy & Entrepreneurship, SBE, Maastricht University

Contact: abel.diazgonzalez@maastrichtuniversity.nl

Pre-requisites

At least one of the following courses:

- ✓ VSS1201 Introduction to Business Administration
- ✓ VSC1501 Sustainable Development
- ✓ VSS2301 Entrepreneurship

Recommendations

Students should be in at least their third semester to take this course

Objectives

On the successful completion of this course you should be able to:

- Critically reflect on social and sustainable entrepreneurship theory and practice
- Identify and evaluate social and sustainable entrepreneurship opportunities
- Develop a strategy for a social/ sustainable enterprise
- Conduct primary research and analyse primary and secondary data in the field of social and sustainable entrepreneurship
- Prepare and present documentation to pitch a novel enterprise idea
- Learn to cope with the chaos and complexity of doing social and sustainable entrepreneurship in the real world.

Description of the course

Interest in the concept of social and sustainable entrepreneurship has been sparked over the last two decades due to frustration with inefficient, ineffective and failed action of government and philanthropic bodies, as well as the socially destructive behaviour of many businesses. An explicit and central social/sustainable mission, innovation, creativity and a strong market orientation are the distinguishing features of social and sustainable entrepreneurship. Social and sustainable entrepreneurs are committed to furthering a social and/or sustainable mission, and rank social, environmental or cultural impact on a par with, or above, profit. At the intersection of business, government and not-for-profit organisations, these social and sustainable entrepreneurs are now visible and having an impact on a global scale.

This course will provide you the opportunity to learn how you can apply your knowledge and skills to address complex sustainability problems. This course is structured around experiential problem-based learning, providing you the opportunity to synthesise theory and practice as you develop an idea for your own social/sustainable enterprises. Topics will include: critically reviewing concepts; user centred-design of social and sustainable enterprises; frameworks for understanding and strategizing; understanding and reporting social and environmental impact; and cross-sector collaboration.

Literature

eReader with papers & Harvard Business cases (You need to pay for your cases, 1prox. €15).

Instructional Format

Lectures, workshops and tutorial meetings

Assessment

- A. Participation (10% of final grade) - Weekly
- B. Facilitation (20% of final grade) – 50-minute session
- C. Individual Video Pitch (Problem/Opportunity) (20% of final grade) – 90 second video
- D. Group Pitch (25% of final grade) – 8-minute pitch + Pitch Deck
- E. Social/Sustainable Enterprise portfolio – group assignment (25% of final grade)

VSS3501 European Food Law

3000 Social Science Course

5 ECTS, Fall Semester, Period 1

Course Coordinator

Leticia Díez Sánchez, International and European Law, Law, Maastricht University

Contact: leticia.diezsanchez@maastrichtuniversity.nl

Pre-requisites

- ✓ At least two courses in the Social Sciences **and/or** VSS1502 Law and Legal Reasoning

Recommendations

None

Objectives

- To gain insight in basic concepts of European food law
- To gain understanding of specific food regulations and its application

Description of the course

This course addresses the structure and content of food law in the European Union as well as its relationships with national and global food legislation. After studying the basic principles of the General Food Law, various specific topics and laws are addressed concerning food hygiene & safety, novel foods, labelling and health claims. The course will also touch upon enforcement of food law and students will gain insights into legislation to understand the application of food law in the food industry.

Literature

TBA

Instructional Format

Lectures and tutorial meetings

Assessment

Written paper and a written final exam

Skills Trainings

VSK1000 The Applied Researcher I

1000 Core Skills Training

2.5 ECTS, Spring Semester, Period 4

Course Coordinator

Connie Drosinou, University College Venlo, FSE, Maastricht University

Contact: connie.drosinou@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

At the end of this skills-training...

- Students have improved their ability to identify and select relevant (scientific) sources, which they can use to support their research question.
- Students have become aware of the importance of analysing a real-life problem sufficiently in order to formulate an adequate research question and hypotheses.
- Students have learned important lessons on systematic, critical, and ethical research.
- Students have learned to design and plan a realistic research project and are able to convey the importance and feasibility of the research project in a written research proposal.
- Students have improved relevant soft skills (planning, communication, team working).

Description of the course

The Applied Researcher I is the first part of a three period research project, in which student groups will work on a research problem provided and supervised by a UM researcher. Before the start of the project students are given the opportunity to designate their preference for a specific problem. Study fields include e.g. Food Innovation, Psychology, Public Health, Marketing/Health Claims,.... The problems provided challenge students to study an issue that is still not fully understood and the answer to the problem has applied implications.

In this project period the focus will lie on analyzing the problem and on coming up with a feasible research plan that sets the foundation for the data collection phase (The Applied Researcher II) and the analysis-writing up results phase (The Applied Researcher III).

Literature

Students will be provided with a small number of content literature that is related to their research focus. In addition, some general literature resources are recommended. However, for the most part students are expected to search for and identify credible and relevant sources by themselves.

Instructional Format

Research mentor meetings with the assigned supervisor, lecture(s), workshop(s), presentation.

Assessment

Written fact sheet (individual assignment) and ethical review application form (group assignment).

VSK1001 Introduction to Academic Skills

1000 Core Skills Training

2.5 ECTS, Fall Semester, Period 1/Spring Semester, Period 4

Course Coordinator

Alvaro Garcia Fuentes, University College Venlo, FSE, Maastricht University

Contact: a.garciafuentes@maastrichtuniversity.n

Pre-requisites

- ✓ None

Recommendations

None

Objectives

Students are able to:

- Identify and explain the ethic and core skills that are part of an academic and the difference with applied sciences.
- Theorise on a specific topic and draw up a thesis statement and an argument structure.
- Apply a structured approach to research and gather scientific literature from databases.
- Communicate through academic writing of a researched theoretical topic with appropriate referencing.
- Provide, receive and make use of feedback through the peer-review process.
- Avoid committing plagiarism and other cases of intellectual theft on their own academic work to prevent fraud.

Description of the course

Although your start at an academic programme is in many ways a continuation of your educational career, we know that the transition to university may provide you with unique challenges. This skills training aims to equip you with the basic tools which will help you succeed at university. From scientific curiosity to critical thinking, we will explore all the characteristics that make us academic colleagues and how that differentiates from other scientific areas. After this skills training, you will be equipped with a unique set of skills that you will practice along your career. We will use various educational formats including lectures, workshops, in class discussions and peer-feedback.

Literature

Advised: Fowler, H. R., & Aaron, J. E. (2015). The Little Brown Handbook (13th ed.). New York: Pearson Longman. (Earlier editions can also be used)..

Additional: Additional Literature may be found in the reference list.

Instructional Format

Workshops, lectures and tutorial group meetings, during which students will do small group exercises.

Assessment

Several written assignments.

VSK1002 Research Methods I

1000 Core Skills Training

2.5 ECTS, Fall Semester, Period 2/Spring Semester, Period 5

Course Coordinators

Simone Eussen, Department of Epidemiology, FHML, Maastricht University

Contact: simone.eussen@maastrichtuniversity.nl

Connie Drosinou, University College Venlo, FSE, Maastricht University

Contact: connie.drosinou@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- To obtain insight in methods to conduct real world research.

Description of the course

Students will be introduced in research methodology by lectures, assignments and self-study. Students will learn why theoretical backgrounds are important to develop hypotheses that can be tested, will learn how to select a suitable study population, how to define and choose appropriate exposure and outcome measures fitting the hypotheses and what this means for internal and external validity. In order to enhance learning, students need to apply this by writing the introduction and part of the research methods of a study proposal on one of the topics provided by the staff and to peer review each others work.

Literature

- Kumar R. Research Methodology – a step-by-step guide for beginners. ISBN9781446269978
- Additional literature will be provided during the course
- Material is available in the Reading Room, UM-Library, as E-reader or as Online Sources.

Instructional Format

Lectures and practical skills trainings

Assessment

Mid-term writing assignment and oral presentation/discussion

This module may be a prerequisite/recommended for:

PEERS

VSK1004 The Applied Researcher II

1000 Core Skills Training

2.5 ECTS, Spring Semester, Period 5

Course Coordinator

Connie Drosinou, University College Venlo, FSE, Maastricht University

Contact: connie.drosinou@maastrichtuniversity.nl

Pre-requisites

- ✓ VSK1000 The Applied Researcher I

Recommendations

None

Objectives

At the end of this skills-training...

- Students have acquired experience in the collection and recording of data, such as implementing a measurement method and statistical package skills.
- Students have become acquainted with the skills needed to analyze research data.
- Students are able to conduct some basic descriptive and inferential statistics using R.

Description of the course

The Applied Researcher II is the second part of a three period research project, in which students will work in small groups to research a problem. Students continue working on the project that they started in the Applied Researcher I. In the current period the focus will lie on gathering the data needed in order to answer the research question(s) formulated and developing analytical skills using the program R.

Literature

No essential reading list is provided. Students are expected to search for and identify credible and relevant sources by themselves.

Instructional Format

Research mentor meetings with the assigned supervisor, lecture(s), workshop(s)

Assessment

R exam (individual assignment)

Written reflection report (individual assignment)

VSK2001 Argumentation

2000 Skills Training

2.5 ECTS, Fall Semester, Period 1

Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University

Contact: mitchell.kiefer@maastrichtuniversity.nl

Pre-requisites

Students who take the course need to have written at least one academic paper.

Recommendations

None

Objectives

This skills training provides a general introduction to the analysis of arguments. At the end of the skills training students should be able to:

- Identify and carve out the underlying structures and logical connections of written and verbal arguments.
- Translate these structures into a visual representation by drawing patterns of these arguments.
- Evaluate arguments with regards to their structure and content by applying Govier's "ARG method" (this entails the ability to identify fallacies).
- Build and present own arguments in a structured and cogent fashion, taking the evaluative criteria of the "ARG method" into account.
- Improve their approach to structure papers, exam answers and presentations.

Description of the course

In this skills training we work from two fundamental assumptions regarding arguments:

1. They have a specific structure, which can be made visible and evaluated.
2. The quality of an argument depends on its structure as much as it depends on its content.

In order to "get a grip" on arguments the course is divided into four parts that introduce information and exercises to gradually develop the skill of argument analysis. The first part will serve as an introduction discussing the general characteristics and typology of arguments. Furthermore, in this part students learn how arguments can be standardized and how argumentative structures can be visualized by drawing patterns. The core question this part of the course seeks to answer is: What is the structure of arguments and how can one reveal this structure? This part of the course will also contain an introductory lecture, entitled "Standardizing Arguments".

In part two an informal but systematic method for evaluating the quality of arguments, the ARG-method, is introduced. By assessing the acceptability of premises, the relevance of premises with regards to the conclusion they are supposed to support, and the logical connection between premises and the following conclusion, the ARG-method enables us to examine both structure and content of an argument. During this part of the course an introduction to bad arguments, so-called fallacies, is provided as well. A Lecture, "Evaluating Arguments", will accompany this part of the course.

In the third part the knowledge and skills provided in the first two parts will be applied to complete texts, seeking to isolate the arguments they present in a systematic way and evaluate whether or not they are good arguments.

Part four moves beyond the analysis of already existing arguments. In this part, standardization and patterns of arguments, as well as the ARG-method, will be used to construct arguments. Furthermore it will be practiced how the skills learned throughout the course can be applied for the purpose of writing academic papers.

Note: Students considering enrolling for the skill trainings in argumentation should be aware that the course will not focus on rhetoric and debating skills (although it can be assumed that the analytical skills acquired in this course will be helpful for debates).

Literature

E-reader with various articles and chapters on argument analysis and logic.

Instructional Format

Assignment-based discussion, supplemented by lectures.

Assessment

A midterm assignment asking students to conduct an analysis of one of their own papers using the techniques of argument analysis and a final assignment in which students compose an argument of their own.

This module may be a prerequisite/recommended for:

Think Tank

VSK2002 Lab Skills 2

2000 Skills Training

2.5 ECTS, Fall Semester, Period 1

Course Coordinator

Alvaro Garcia Fuentes, University College Venlo, FSE, Maastricht University

Contact: a.garciafuentes@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

VSC1401 Introduction to Chemistry

VPR1004 Research Methods 2 – Lab skills

Objectives

Students can...

- Analyse a problem and formulate research questions that involve lab experiments.
- Write a protocol and planning of the activities to be executed in the lab to answer the research questions.
- Conduct laboratory experiments with precision, accuracy and professionalism demonstrated through use and execution of advanced laboratory techniques and proper registration of procedures in the lab journal.
- Assess and conclude over experiment's results to answer a given research question and outline the conclusion in a scientific report.

Description of the course

Lab Skills 2 is a course that originates scientific curiosity in the student. It builds on top of different science courses in the UCV curriculum and stimulate to answer research questions on different topics using advanced laboratory techniques. This creates an environment that gives the opportunity to formulate your own research questions regarding a specific problem to develop a protocol that makes use of different abilities and skills to handle laboratory equipment in a safe and precise manner. Accuracy, focus, and constant questioning will be part of this course to finally obtain solutions to different practical challenges presented during the different sessions.

Literature

Literature will be provided for each task individually. Besides, you will need to look for your own sources according to the research question.

Instructional format

Laboratory sessions.

Assessment

Prelab preparation, lab journal control, and practical reports

VSK2003 Lab Skills 3

2000 Skills Training

2.5 ECTS, Fall Semester, Period 2

Course Coordinator

Herman Popeijus, Human Biology, FHML, Maastricht University

Contact: h.popeijus@maastrichtuniversity.nl

Pre-requisites

- ✓ VPR1004 Research Methods II: Lab Skills or equivalent OR
- ✓ VSK2002 Lab Skills 2

Recommendations

Interest in biology and laboratory experiments

Objectives

- To give insight into the basics of biology experiments
- To obtain the ability to do the basic laboratorial calculations
- To provide basic skills in ELISA, Photo spectrometry, PCR and gel electrophoresis
- To provide the theory behind these techniques

Description of the course

The general aim of this course is to obtain knowledge about the molecular processes in cell signalling and control of gene expression. Topics include intracellular signalling pathways; chromatin structure and remodelling and finally genetic modifications.

Literature

Practical Skills in Biomolecular Sciences, ISBN-13: 978-0132391153

Instructional format

Laboratorial meetings.

Assessment

Preparation (20%); Labjournal (10%); 1 short practical reports (10%); basic laboratorial calculations (40%); MCQ and open-ended questions (20%).

VSK2004 Academic Writing

2000 Skills Training

2.5 ECTS, Fall Semester, Period 1

Course Coordinator

Adam Simpson, Language Centre, UB, Maastricht University

Contact: a.simpson@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

During this advanced writing course, students will

- Deepen academic writing skills appropriate for academic exchanges: understanding how to report on approaches, conduct a short literature review (individual) and write a research proposal (individual)
- Learn to use the analysis of the data to support a scientific hypothesis, as well as correct use of grammar and spelling
- Learn relevant paraphrasing and summarizing techniques
- Practise how to cite properly together with how to write proper references
- Give and receive feedback on academic writing.

Description of the course

This course is designed to assist students in polishing their academic writing skills. You will more than likely have already written a number of papers for various courses before attending this course; therefore, this course will not review the very basics of writing or grammar. Rather, this skill's training course will focus on advanced levels of different types of writing to help students look deeper into style while writing in grammatically correct English, and re-visit successful means of argumentation in an academic context.

Literature

Recommended: Fowler, H. R., & Aaron, J. E. (2004). *The Little, Brown Handbook* (9th ed, or higher). New York: PearLongman. Any other course hand-outs or materials will be provided via Student Portal

Instructional format

Tutorial (6) meetings.

Assessment

Paper 1 and 2 each count for 50%

VSK2005 Presentation Skills

2000 Skills Training

2.5 ECTS, Fall Semester, Period 1

Course Coordinator

Karin Lenssen, University College Venlo, FSE, Maastricht University

Contact: karin.lenssen@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

Students must be familiar with PowerPoint or other types of slideware, such as Prezi.

Objectives

Students...

- Can prepare and structure a clear, concise and persuasive message.
- Will explore ways to engage the audience and make your message stick.
- Will be able to convey complex information clearly through visual and oral presentation skills;
- Will learn how to handle nerves and tension and increase your confidence as a presenter.

Description of the course

Students will study and practice different aspects of an academic presentation. All students will give a number of presentations and work on various elements of presentations in different workshops, in particular outline, content and the final delivery. In the first meeting, students will give a presentation on a set topic. Then students can decide on their own topics to present, usually within their field of interest. The purpose is to learn how to structure a scientific presentation and to be able to convincingly convey information about a topic that you are knowledgeable about to other people. Besides giving presentations, an important aspect of this training is giving and receiving constructive feedback. Both the trainer and your fellow students will provide you with feedback and you will be asked to provide feedback several times. Students are expected to use the feedback to improve their skills. The training will help you to prepare future presentations to different types of audience, both at UCV and as part of a future job or master programme.

Literature

Learning materials are provided at Student Portal

Instructional format

Tutorial group meetings

Assessment

- Graded presentations
- Video analysis (of your own presentation)
- Written feedback to fellow students

VSK2006 Clinical Lab Skills

2000 Skills Training

2.5 ECTS, Fall Semester, Period 1

Course Coordinator

Khrystyna Semen, University College Venlo, FSE, Maastricht University

Contact: k.semen@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- To apply main principles of Good Clinical Practice in clinical research;
- To perform and assess basic anthropometric and cardiorespiratory measurements;
- To understand basics of electrocardiography, spirometry, exercise testing;
- To perform a basic evaluation of electrocardiogram and spirogram;
- To perform a basic assessment of the exercise tests.

Description of the course

Clinical Lab Skills introduces basic techniques which are used in clinical practice to assess functions of the organ and systems of the human body. During the training, you will learn how to perform basic anthropometric measurements in humans, which methods can be used to assess body composition, how cardiovascular function and fitness level can be measured. Furthermore, students will build expertise on basic interpretation of electrocardiograms, heart rate variability and lung function testing. During the tutorials importance of the informed consent process and application of the Good Clinical Practice in studies involving human participants will be discussed. Overall, students will acquire and improve their skills to perform clinical research.

Literature

A combination of basic books and E-reader will be used. Moreover, the students will have to search and select the articles themselves.

Instructional format

Educational workshops with practical trainings

Assessment

Clinical lab journal, which includes home preparations, practical reports and reflections

VSK2007 Risk Communication & Crisis Management

2000 Skills Training

2.5 ECTS, Spring Semester, Period 4

Course Coordinator

Jaap C. Hanekamp, University College Roosevelt

Contact: hjaap@xs4all.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

During this skills training, students will learn to approach risk communication from different disciplines:

1. risk assessment
2. risk psychology
3. sociology

Also to practice risk communication taken into account personal and social perception and acceptance and background, different opinions about risk issues.

Description of the course

Most scientific research about risk is based on the likelihood that something will happen and the impact what this will have: on humans, animals, the environment or climate for example. Think of a foodborne illness, the development of AI-robots that are smarter than ourselves, or the plastic soup in our oceans. But risk = chance x effect is not the whole message. Risks are rooted in society and are therefore closely connected with the life and especially the values and perceptions of the society-members, on which they base their risk-acceptance.

Scientific risk assessment can be perceived as an equivalent of 'fake' messages about risk issues on the internet or social media. Who can be trusted and who absolutely not, who can do what to take control of the risk. These are all elements of the course 'the strategy of risk communication'. Students will learn about the six building blocks of the strategy, which are rooted in behavioural economics, sociology, risk-ontology and psychology. Together they give insight in that a risk is more than probability/severity, knowledge that is necessary to connect the scientific outcomes to the society you are working for.

Literature

TBA

Instructional format

Six meetings: 30 minutes theoretical considerations and background, exercise training based on actual cases.

Total duration each week: two hours.

Assessment

Development of a risk communication strategy based on two actual cases

VSK2008 Visualization and Data Storytelling

2000 Skills Training

2.5 ECTS, Spring Semester, Period 5

Course Coordinator

Kay Schröder, Data Visualization, Zuyd University of Applied Sciences

Contact: kay.schroeder@rwth-aachen.de

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- Students understand what is meant by data storytelling.
- Students have become acquainted with differences visualization methods/techniques that are used in data storytelling.
- Students have learned to think critically about how to combine data, visuals and narrative into an effective visual representation.
- Students have learned how to develop an infographic.

Description of the course

Google's Chief Economist Dr. Hal R. Varian stated in 2009 "the ability to take data—to be able to understand it, to process it, to extract value from it, to visualize it, to communicate it—that's going to be a hugely important skill in the next decades." This course will focus on the last steps in this process, namely how to give numbers a clear and convincing visual voice; how to share understanding visually. Visuals are processed 60,000 times faster than words alone and remembered by 80% of the people (contrary to 20% for reading). Data storytelling is a structured approach for communicating data insights, and it involves a combination of three key elements: data, visuals, and narrative. In this skills training students will get an introduction into how one combines the right visuals and narrative with the right data, as this drives change in real life. People hear statistics, but they feel stories. Great data storytelling allows someone who's never heard of data science to understand what information one wants to transmit.

Literature

- Storytelling with data: a data visualization guide for business professionals, Cole Knaflic, Wiley, 2015, Hoboken, New Jersey, ISBN:1119002257
- The Visual Display of Quantitative Information, Edward R. Tufte, Graphics Press, 2001, Cheshire, Conn, ISBN:9780961392147
- Tamara Munzner: Visualization Analysis & Design, CRC Press, Boca Raton USA, 2014

The required books for this course can be found in the Campus Venlo Library. All literature may also be accessed via the reference list: <http://referencelist.library.maastrichtuniversity.nl/>.

Alternative resources may be found via the University Library: <http://library.maastrichtuniversity.nl/>

Instructional format

Lectures and Hands on Sessions

Assessment

Develop a Data Story and write a report + weekly case assignments

VSK2009 Leadership Skills

2000 Skills Training

2.5 ECTS, Fall Semester, Period 2

Course Coordinator

Alie Boer, de, University College Venlo, FSE, Maastricht University

Contact: a.deboer@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

At the end of the skills-training, students

- can distinguish different leadership styles and reflect on their own style of leadership
- have recognized the interrelationship between organizational culture and leadership and reflect upon their own leadership behaviour in groups
- have identified some of their personal VABEs (values, assumptions, believes and expectations) and reflected upon how they influence their communication as a leader
- can execute effective verbal and non-verbal active listening skills and reflect how their ability to listen affect their leadership skills
- can differentiate between conflict styles and have discovered their personally preferred conflict style with its advantages and pitfalls.
- can reflect on ethical leadership and appraise the value of authenticity and charisma for ethical leadership behaviour

Description of the course

The idea that leadership is an innate quality that is possessed only by a few people in the world, is not considered valid anymore. In truth, leadership can be studied and learnt through discussion, exercises and being open to different opinions. In which situations is what type of leadership required? How are group dynamics influencing leadership? What skills are necessary for a leader? And what about your personal skills: which skills do you want to (further) develop and what aspects suit you less? Which leadership style is most effective for you? This skills training is aimed to inspire you and further develop your personal leadership skills and is relevant for students at any level of leadership skills development.

Literature

Materials available on Student Portal.

Instructional Format

Interactive Workshops and Educational Games; Self Reflection; Peer Feedback

Assessment

- 70% of grade: weekly assignments in portfolio
- 30% of grade: final assignment in portfolio

VSK2010 Creativity & Concept Development of New Business

2000 Skills Training

2.5 ECTS, Fall Semester, Period 2

Course Coordinator

Roy Broersma, Centre for Entrepreneurship and Innovation, SBE, Maastricht University

Contact: r.broersma@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

VSS2301 Entrepreneurship

Objectives

- To be able to apply creativity techniques to problem solving
- To understand how creativity can be used to transform technology into product concepts.
- To be able to draft business concepts and business models that result from technology product ideation.

Description of the course

A key role of corporate R&D-labs is to translate novel technology into new products and new business. Customer feedback may also trigger product and business development. Envisioning how novel technology can be used to develop and market new products is an inherently creative process that should not only be mastered by business developers, but also by scientists and technologists.

This course is focused on developing your competence at two important tasks for the creation of new business: [1] discovering (technological) opportunities, [2] developing product, business concepts and business models.

Creativity plays an important role in several, if not all, aspects of what makes organisations work and flourish. Creative problem solving is therefore an essential skill for those that expect to find employment as scientists in industry and academia. It is also valuable to those that eventually may become corporate or self-employed entrepreneurs.

During this skills course we will touch upon important aspects of creative problem solving. But, most of all, we will provide you with insights that will help you to develop your own creative skills. The starting point of the training is our belief that creativity is an ability that, to a certain extent, can be learned and trained. We will follow different paths to help you investigate your own creativity skills and to find the best way to improve them.

Literature

- Reader with papers & cases

Instructional Format

Workshops

Assessment

1. A midterm assessment, which consists of an evaluation of a Keynote/PowerPoint presentation of ideation outcomes;
2. A final individual assessment, which consists of a combined project & reflection paper

VSK2011 Influencing and Negotiation Skills

2000 Skills Training

2.5 ECTS, Spring Semester, Period 4

Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University

Contact: mitchell.kiefer@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- To develop effective negotiation skills to achieve integrative, 'win-win' outcomes
- To identify negotiation strategies and learn how and when to apply them
- To navigate diverse and challenging personalities, communication styles, and differences in bargaining power

Description of the course

This course is aimed at developing analytic and communication skills that are necessary for successful negotiations. Students will learn different negotiation styles and models, and will use these to develop skills across three stages of negotiation: preparation, negotiation, and evaluation. The course will encourage students to approach conflicts and disagreements as possible win-win rather than zero-sum scenarios, and students will learn specific techniques in pursuit of this goal. For instance, students will develop skills to best prepare for negotiations, facilitate negotiation processes, bargain with difficult partners, and manage cross-cultural elements of conflicts.

Literature

- Fisher, Roger, William Ury and Bruce Patton. 2012 (1999). *Getting to Yes: Negotiating Agreement Without Giving In*. Random House Business.
- Diamond, Stuart. 2018 *Getting More: How You Can Negotiate to Succeed in Work and Life*. Currency.
- Voss, Chris and Tahl Raz. 2016. *Never Split the Difference: Negotiating as If Your Life Depends on It*. Harperbusiness.

Instructional Format

Weekly meetings involving negotiation simulations

Assessment

Reflection paper regarding simulations

Group Project: Build a Negotiation Simulation

VSK2012 Integrated Assessment

2000 Skills Training

2.5 ECTS, Fall Semester, Period 2

Course Coordinator

Pim Martens, University College Venlo, FSE, Maastricht University

Contact: p.martens@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- Understand the concept of Integrated Assessment (IA)
- Understand how various IA tools and methods are used
- Get hands-on experience in using several IA tools (e.g. models, scenarios, games)

Description of the course

An interdisciplinary study skill in Integrated Assessment methodologies and concepts as an approach to address complex societal issues associated with the challenge of sustainable development.

Integrated Assessment is an iterative, continuing process, where integrated insights from the scientific and stakeholder communities are communicated to the decision-making community, and experiences and learning effects from decision-makers form one input for scientific and social assessment. This complex, intuitive, and value-laden process operates at a variety of levels and scales. Multiple diverse approaches are needed, varying from analytical methods (such as Integrated Assessment models) to participatory methods (such as focus groups).

Theory is mixed with practice through lectures, discussions, IA sessions and games.

Literature

All material (problem descriptions and supporting literature) will be provided during the course and made available through the Student Portal. There is no specific textbook.

Instructional Format

Lecturing, computer-based group practicals, research-based learning.

Assessment

Graded IA exercises.

VSK3004 Digital Professional Communication

3000 Skills Training

2.5 ECTS, Spring Semester, Period 5

Course Coordinator

Karin Lenssen, University College Venlo, FSE, Maastricht University

Contact: karin.lenssen@maastrichtuniversity.nl

Pre-requisites

✓ None

Recommendations

None

Objectives

Description of the course

Whatever your background, you need to deliver compelling messages both on- and offline to enhance your professional development. Professional communication practices used to consist primarily of written, verbal or oral communication. But in an increasingly digitalized world another form of communication has become indispensable: digital professional communication. The digital world is somewhat similar but also somewhat different compared to the real world. People have access to an enormous amount of information online, so you need to know how you stand out. In addition, not all information that is available is factually true, so it is important to know how to critically assess the information that you read online. This is all part of the skills course 'digital professional communication'.

The following questions will be addressed in this course. What is professional communication? And what makes digital professional communication different to the other forms? How does it affect that people communicate and interact? How can we use them effectively? E.g. how should a professional text look like and how can we use social media in a professional manner? What are the pitfalls and challenges in digital communication? And which type of digital communication is going to be effective for your personal professional development? In this skill training you will gain insight into the changing landscape of professional communication and how to navigate through this. Students will get practical skills related to writing, designing and critical reading. In addition, students will learn to think about their impact and personal brand in the digital world.

Literature

Students are provided with workshops in which suggested readings are provided.

Additionally, students should read popular science articles to get familiar with the used writing styles.

Instructional format

Weekly workshops and practical assignments

Assessment

Professional personal website, fact check, popular science entry and video CV

VSK3101 PEERS – Undergraduate Research I

3000 Skills Training

2.5 ECTS, Spring Semester, Period 4

Course Coordinator

Khrystyna Semen, University College Venlo, FSE, Maastricht University

Contact: k.semen@maastrichtuniversity.nl

Pre-requisites

None

See VPR3103 PEERS

VSK3102 PEERS – Undergraduate Research II

3000 Skills Training

2.5 ECTS, Spring Semester, 5

Course Coordinator

Khrystyna Semen, University College Venlo, FSE, Maastricht University

Contact: k.semen@maastrichtuniversity.nl

Pre-requisites

VSK3101 PEERS - Undergraduate Research I

See VPR3103 PEERS

VLA2000 Language Training

2000 Skills Training

2.5 ECTS, Fall Semester/Spring Semester, Period 1/2 and 4/5

Course Coordinator

Maastricht University Language Centre

www.maastrichtuniversity.nl/languages

Pre-requisites

Language trainings are open to all UCV students. Within the UCV curriculum a language course counts as a 2000-level skills training. Each student can take up to two language courses or 5 ECTS in total. UCV uses a specific registration procedure for language trainings (see below). To determine the level of a course that is suitable to a student's proficiency in the language, the registration might include an intake procedure

<https://www.maastrichtuniversity.nl/nl/intake-procedures>.

Objectives

Please refer to the website of the Language Centre UM, www.maastrichtuniversity.nl/languages, for further information about the levels, intake requirements and content of the courses.

Description of the course

Students can choose a language course from the list of courses that are on offer for UCV students as long as it is not English or their native language. It goes without saying that the choice of a certain language course can be related to future plans and the country students select for doing their semester abroad. However, this is not obligatory.

Literature

Most courses use standard text- and workbooks that can be obtained at Studystore. In some courses materials will be used that the Language Centre UM has developed. Those materials will be handed out to you by your tutor or they will be sent to you by e-mail or Student Portal. Further information on the books that need to be obtained can be found at the website www.maastrichtuniversity.nl/languages.

Instructional Format

Dutch courses run for 7 weeks (two sessions per week) or 14 weeks (with one session per week). The modern languages courses run for 14 weeks (with one session per week). In the latter case you will follow a language training **and** one regular skills training over the course of 2 periods. **The language training partially overlaps with the period in which you have a regular skills training (creating a slightly higher workload in that period)**. Please note that the majority of language courses are taught in the late afternoon or evenings.

Assessment

All language courses will use an attendance and assessment procedure to determine whether or not you have passed or failed the course. The test results will be graded on a 10-point scale.

Attendance

Language courses have an attendance requirement of 85%, which means that you are allowed to miss two sessions. If you miss three sessions you must give your tutor a valid reason. The tutor will then decide on the validity of the reason. Only if your reason is held to be valid, you will be given an extra task by the tutor. If you miss four sessions or more you fail the course.

Registration procedure

Indicate "VLA2000 Language Training" in the list of skills on the course registration form. You will then be contacted by the Language Centre on how to register for the specific course and if necessary to determine your current proficiency.

Projects

VPR1002 The Applied Researcher III

1000 Core Project

5 ECTS, Spring Semester, Period 6

Course Coordinator

Connie Drosinou, University College Venlo, FSE, Maastricht University

Contact: connie.drosinou@maastrichtuniversity.nl

Pre-requisites

- ✓ VSK1000 The Applied Researcher I; VSK1004 The Applied Researcher II

Recommendations

None

Objectives

At the end of this project...

- Students have developed a basic ability to analyze collected research data and synthesize the results with the acquired content knowledge in order to draw reliable conclusions.
- Students have become aware of what constitutes an academic research article
- Students have further developed abilities needed to successfully complete a research project (analyzing own data, writing and evaluating own research).
- Students have gained experience in critically analysing a research study
- Students have become acquainted with presenting their research in a conference and answering critical questions.

Description of the course

The Applied Researcher III is the third and last part of a three period lasting research project, in which students will work in small groups to conduct research. Students continue working on the project that they started in the Applied Researcher I.

In this period the focus will lie on analyzing and interpreting the collected data after acquiring additional analytical skills in R and communicating the findings of the research project in a written research article that is of sufficient quality to be submitted to a journal. Students will also prepare and defend their research project in a poster presentation conference.

Literature

No essential reading list is provided. Students are expected to search for and identify credible and relevant sources by themselves.

Instructional Format

Research mentor meetings with the assigned supervisor, lecture(s), workshop(s)

Assessment

R exam (individual assignment)

Written research article (group assignment)

Research poster presentation (group assignment; pass/fail).

VPR1003 Research Methods II: Applied Academics

1000 Core, Elective Project

5 ECTS, Fall Semester, Period 3/Spring Semester, Period 6

Course Coordinator

Bas Verhage, Department of Epidemiology, FHML, Maastricht University

Contact: bas.verhage@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

1. Knowledge and insight on:

The student

- is able to distinguish between various measures of frequency of health outcomes
- has basic knowledge of and insight into the principles of classifying health and disease outcomes
- is able to distinguish between the various types of health measurement scales and the relevant aspects of the quality of a health measurement scale
- is able to distinguish between various measures that quantify the strength of association between determinants and health outcomes
- is able to distinguish between various study designs in epidemiology
- is able to identify the major advantages and disadvantages of the different epidemiological study designs knows the difference between internal validity and external validity of epidemiological studies
- appreciates the potential threat of bias (confounding, information bias, selection bias) to the internal validity of an epidemiological study.
- appreciates the difference between confounding and effect modification (interaction)
- appreciates various design measures to prevent bias or to adjust for bias in observational and intervention research
- has knowledge and understanding of the principles of causality and causal reasoning, and be able to distinguish between various criteria that can be used to assess a causal relationship between exposure and health outcome.
- is able to critically appraise an intervention study

2. Application of knowledge and insight:

The course participant is able to recognize and assess the general quality of an epidemiological study

Description of the course

In this project we will build upon the expertise gathered in part I. Through lectures and tutorials we will explore in more detail research methods which can be used, decisions on when to use which research method and how to read, understand and appreciate basic research material.

Literature

- Webb, P., & Bain, C. (2010). Essential epidemiology: an introduction for students and health professionals. Cambridge University Press.
- More literature will be provided in the e-reader

Instructional Format

Interactive lectures, workgroup sessions and homework assignments

Assessment

Students need to critically reflect on the final assignments done in VSK1002. Additionally an open exam in which an article is critically reflected upon will be part of the examination. The final grade is a weighed combination of both grades.

This module may be a prerequisite/recommended for:

PEERS

VPR1004 Research Methods II: Lab Skills

1000 Core Elective Project

5 ECTS, Fall Semester, Period 3/Spring Semester, Period 6

Course Coordinator

Koen Verhees, University College Venlo, FSE, Maastricht University

Contact: koen.verhees@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

VSC1401 Introduction to Chemistry

Objectives

Students can...

- Identify laboratory equipment and materials that are commonly present in a laboratory.
- Use the laboratory equipment and materials with precision and efficiency.
- Apply the safety and good laboratory practices in the development of scientific experiments across all the practical sessions.
- Conduct laboratory experiments with precision, accuracy and professionalism demonstrated through use and execution of basic laboratory techniques.
- Assess the experimental results and formulate coherent conclusions.

Description of the course

Research Methods 2: Lab Skills (*a.k.a. Lab Skills 1*) is a project course that focuses on conducting and reporting on scientific experiments. Students learn to use the lab in a safe manner and according to the Good Laboratory Practice (GLP) and Safe Laboratory Practice (SLP) principles, in order to answer their scientific research questions. You will become familiar with accurate measurement of volumes and weights, preparation of chemical solutions, use of basic laboratory techniques, keep your findings in a journal, and reporting your results.

Literature

Literature will be provided for each task individually. Besides, you will need to look for your own sources.

Instructional Format

Laboratory sessions.

Assessment

Online prelab preparation, lab journal control, and practical reports

This module may be a prerequisite/recommended for:

Applied Researcher, Lab Skills 2, Lab Skills 3, PEERS

VPR2001 Writing a Research Proposal

2000 Project

5 ECTS, Spring Semester, Period 6

Course Coordinator

Adam Simpson, Language Centre, UB, Maastricht University

Contact: a.simpson@maastrichtuniversity.nl

Pre-requisites

- ✓ VSK2004 Academic writing

Recommendations

VSK2001 Argumentation

Objectives

At the end of this project:

1. Students will be aware of the importance of analysing a real-life problem sufficiently in order to formulate an adequate research question and hypotheses in the context of an academic grant proposal;
2. Students will have practiced presenting their research focus and answering critical questions, both in writing and verbally;
3. Students will have developed abilities needed to successfully complete a research proposal (planning, writing, evaluating, presenting);
4. Students will have improved relevant soft skills (planning, communication, as well as providing and processing peer feedback).

Description of the course

You will learn to write a professional research proposal.

In the project context of applying for a research grant, the focus will lie on the process steps of writing a research proposal, and communicating a clear research focus, both in writing, as well as via a short personal proposal presentation (pitch).

Each session will focus on the conventions and requirements for writing a specific section of the proposal, along with guidelines on the effective use of academic English in writing a research proposal.

The outcome will be a research proposal that could be submitted to an external Grants office, such as the UM Universiteitsfonds.

Literature

No essential reading list is provided. Depending on their topic of choice, students are expected to search for and identify credible and relevant sources by themselves, and arrive at a short list of required reading. Nevertheless, the following are recommended:

- Fowler, H. R., & Aaron, J. E. (2004). *The Little, Brown Handbook* (9th ed, or higher). New York: PearLongman.
- Kumar R. *Research Methodology – a step-by-step guide for beginners*. ISBN9781446269978

Instructional Format

In In this project 2 instructional formats are used.

1. A total of 9 mentor/group meetings, in which a group discusses their research progress, questions etc. with their research mentor

2. 1 Final proposal presentation Workshop

Assessment

Written research proposal (as individual assignment; 80 %) and

Final presentation (pitch, as individual assignment; 20 %) on the last day of the project

This module may be a prerequisite/recommended for:

Think Tank

Capstone project

VPR2002 Academic Debate

2000 Project

5 ECTS, Fall Semester, Period 3

Course Coordinator

Khrystyna Semen, University College Venlo, FSE, Maastricht University

Contact: k.semen@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

- To equip students with essential debating and communication skills.
- To introduce students to the practice of speaking in a public setting.
- To practice argumentation skills.
- To gain expertise on a topic of choice (the debate topic).

Description of the course

Debating skills are an important component of academic life. In this 2000 level-project, students will prepare, present and defend a position for an academic debate. The debate topics will be centered around the issues that emerge out of a wide range of UCV courses from different concentrations taught during the academic year. There will be a “yes” (pro) and a “no” (con) team, which will build their argumentation strategy and prepare to refute arguments of the opponents throughout the project in order to win a debate. The emphasis lies on delivery and content. It is not only important to think about what you deliver, but also about how you deliver it. In the end, it will be your job to persuade an audience as to the correctness of your position. In order to do this, you need a coherently structured, logically laid out set of arguments that you will present in a clear and self-assured way. Your task is to make the issue involved come alive.

Literature

Students will choose, read and use literature that is related to their debate topic. Some of the literature will be suggested by the tutor; however, most literature has to be found by the students themselves.

Instructional Format

Tutorial group meetings, a lecture/workshop on debate and debating skills, workshops on argumentation, open debate.

Assessment

A position paper (individual grade) and a debate (group grade).

This module may be a prerequisite/recommended for:

Think Tank

VPR2004 Strategic Marketing and Practice

2000 Project

5 ECTS, Spring Semester, Period 6

Course Coordinator

Dr. Marcel van Birgelen, Department of Marketing & Supply Chain Management, SBE, Maastricht University
Contact: m.vanbirgelen@maastrichtuniversity.nl

Pre-requisites

✓ None

Recommendations

None

Objectives

In this course we will take the viewpoint of the Chief Marketing Officer (CMO). A CMO is not simply an implementer but rather a maker of organization strategy. More specifically, a CMO is expected to be a leader in defining the mission of a business, in analyzing competitive market situations, in developing business objectives and goals, and in defining customer value propositions and marketing strategies that create value for a business unit as a whole.

Hence, we will use this perspective to address the issues of (1) defining and developing the strategic goals of the organization; (2) identifying organizational growth opportunities through customer and market analysis; (3) formulating product-market strategies; and (4) budgeting marketing, financial and production resources.

Description of the course

In an increasingly dynamic environment companies require a capacity to continuously learn about and swiftly respond to markets. Fundamental to this is the customer perspective, the recognition that company success comes from delivering superior customer value. Marketing traditionally has advocated the customer focus; yet, today, marketing needs to take on a more strategic, coordinative role within the firm to craft more interactive strategies when it comes to consumers and partners. Thus, it is imperative for both marketing and non-marketing specialists to grasp how marketing helps the firm design strategies starting from the customer.

The course Strategic Marketing and Practice focuses on designing strategies from the market back to create, deliver, and sustain customer value in competitive and dynamic markets. To do so, this course deals with a comprehensive investigation and analysis of all major components of marketing strategy and their integration. This course takes a business-oriented setup by focusing on real life examples/cases and by allowing students to participate in a market simulation game. The objective of the simulation is to put into practice the concepts related to marketing strategy and the marketing mix in a risk-free environment.

Literature

Palmatier, R. W., & Sridhar, S. (2017). Marketing strategy: Based on first principles and data analytics. Macmillan International Higher Education. + academic articles

Instructional Format

Tutorial group meetings, participation in market simulation game

Assessment

Group report, individual report

VPR2005 Interviewing

2000 Project

5 ECTS, Fall Semester, Period 3

Course Coordinator

Karin Lenssen, University College Venlo, FSE, Maastricht University

Contact: karin.lenssen@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

This course is for students with a background or sincere interest in interviewing for different purposes: both for medical and psychological studies, as well as for the purpose of conducting qualitative research.

Objectives

- Recognise when to use which conversation technique;
- Connect conversation techniques to various purposes;
- Recognise and explain different interviewing formats for different purposes;
- Organise and interpret the data gathered through interviews;
- Novice level application of basic and more advanced interview techniques in order to retrieve the required information.

Description of the course

Whether it is for diagnose someone or trying to understand people's behaviour or success, interviews can be a rich source of information. However, when is a specific type of interview the best fit for the purpose that you have in mind? How to conduct such an interview? And what to do with all the information that you have gathered? This project will introduce you to a selected number of interview techniques, that can be used in different settings, focussing on motivational interviewing and scientific interviewing. Within workshops, you will practice to conduct and analyse different interviewing techniques. This project aims to inspire you to make optimal use of interviews in future work.

Literature

Materials available on Canvas.

Instructional Format

Workshops

Assessment

Conducted interviews (20%), reflection report (40%) and scientific report (40%).

VPR2006 Deep Reading

2000 Project

5 ECTS, Fall Semester, Period 3

Course Coordinator

Su-Mia Akin, University College Venlo, FSE, Maastricht University

Contact: su-mia.akin@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

- ✓ None

Objectives

- Students recognize what the basic principles of deep reading are.
- Students implement deep reading principles when reading a seminal text linked to a scientific field.
- Students individually author a critical book review.

Description of the course

In this project students will engage in the 'deep reading' of a provided seminal, influential or otherwise significant text related to the social sciences, natural sciences and/or humanities. Rather than selectively skimming for facts or speed-reading for summaries, the process of deep reading means slowing down, re-reading and even stopping periodically to more fully contemplate specific pages or passages. 'Deep reading' is a process of slow, thoughtful and deliberate reading through which the reader actively works to critically contemplate, understand and ultimately enjoy a particular text to the fullest extent possible. Having considered and recognized what a text says, deep reading asks us to also reflect upon the broader intellectual, scientific, social, cultural or political implications of the text. Students will work through the processes of deep reading individually and collaboratively through individual, partner and group-based deliberation/ discussion.

Literature

A single seminal text/book (classic or contemporary) will be assigned by individual tutors.

Instructional Format

Tutorial group meetings, lecture(s), small group (online) discussion(s).

Assessment

Reading assignments, a personal reflection essay, a presentation

VPR3002 Think Tank

3000 Project

5 ECTS, Fall Semester, Period 3

Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University

Contact: mitchell.kiefer@maastrichtuniversity.nl

Karin Lenssen, University College Venlo, FSE, Maastricht University

Contact: karin.lenssen@maastrichtuniversity.nl

Pre-requisites

One of the following modules: VSK2001 Argumentation; VPR2002 Academic Debate; VSC1303 Introduction to Statistical Methods and Data Analysis (or VSC2305 Intermediate Statistical Methods and Data Analysis); VSC2204 Public Health Policy Making.

Recommendations

The project and the nature of the assignment require some experience in academia. Therefore students can only take the project in their fourth semester or later. This also allows students to do well and gain more from the project.

The coordinators would like to emphasize that Think Tank is a time-consuming project with a high workload, which requires highly motivated students. Students should have a broad interest in e.g. policy development and research and analysis. Due to the specific nature of the project and the fact that group work is an essential element, students should take into account that they need to be available during entire weekdays throughout the entire project.

Participating in Think Tank as part of the regular workload at UCV is doable but demanding. Therefore, having a higher workload due to e.g. additional or parallel projects is not allowed.

Objectives

- Let students work together and set up a problem analysis based on the assignment given by an external client, i.e. to develop skills concerning critical analysis, including the analysis of a problem, conceptualizing a problem as a case study (the ability to see the particular problem within a wider context), and to generate new knowledge relevant to the case at hand (Boyer's 'discovery' and 'integration')
- Let students work together and do research based on the assignment that was given to them, i.e. to develop skills concerning organization of work, and collaboration in a team (not specifically related to Boyer, yet instrumental towards all four aspects at the level of collaborative learning);
- Let students write a report based on an assignment that was given to them, i.e. skills related to formulating finding and recommendations in a comprehensive yet concise manner ('application' and 'teaching')
- Let students present their report to the representative and a group of experts ('teaching').

Description of the course

Students will be assigned to writing and presenting a (policy) recommendation that is partly based on the knowledge and expertise they have developed as a result of their educational programme at UCV. Students will form a 'think tank' and write and present an extensive and elaborate (policy) recommendation for a client, i.e. a company or organization. A creative and critical analysis of the problem at hand will lead to the application of knowledge and skills acquired at UCV through previous course work, and new insights developed during the project.

The first week of ThinkTank will focus on a problem analysis and an analysis of the knowledge and expertise of the members of the think tank. The second week will focus on doing research. The third week will deal with discussing and formulating solutions. During the final week, students will present their report to an audience of experts and share their recommendations with the client.

Besides having meetings with their fellow students and a tutor, the group might meet with guest experts (either invited by the coordinators or by the students themselves) and undertake self-organized field trips and external visits to obtain the required information. Depending on their academic background and skills, students will divide the workload and take on specific roles within the ThinkTank.

Literature

Students search for their own literature depending on the demands of the assignment.

Instructional Format

Students will meet with their group on a daily basis by means of tutorial group meetings, external visits and workshops.

Assessment

Problem analysis (group assignment), individual research memo, final group report and a final presentation of the report (group assignment).

VPR3003 Science Communication Mini-Documentary

3000 Project

5 ECTS, Spring Semester, Period 6

Course Coordinator

Alvaro Garcia Fuentes, University College Venlo, FSE, Maastricht University

Contact: a.garciafuentes@maastrichtuniversity.nl

Pre-requisites

- ✓ None

Recommendations

None

Objectives

Students are able to...

- List the basic theoretical underpinnings of making a documentary.
- Identify the concept of science communication and the challenges of proper communication for different audiences.
- Construct a brief and a plan to produce a documentary.
- Implement practical skills on filming and editing to develop quality footage.
- Communicate scientific knowledge critically, correctly, and accessible to a broad audience through the production of a mini-documentary.
- Judge a journalistic communication of a scientific topic to determine the actual facts behind it.

Description of the course

According to director Beeban Kidron in her 2012 TED talk, films are the 20th century's most influential art form because they allow people to tell stories across national boundaries and languages. It is through film that people in today's connected and fast-changing world are increasingly introduced to values, struggles, innovations, and beliefs beyond their daily experience. Mini-documentaries are one type of way to visually share ones message/story. Documentaries form a practical way to communicate ones story and appeal to a broad audience. It is low-budget, allows non-fiction come to life and creates, if developed correctly, awareness. In this project, students work in small teams to create a mini-documentary on a specific topic. Next to being introduced to the theoretical underpinnings of the medium documentary, this project focuses on developing the skills needed to create a mini-documentary and combining these skills with the knowledge and research skills that students have acquired at UCV so far. The best mini-documentary will be presented at the UCV student conference.

Literature

Literature will be provided accordingly during the progress of the project. Besides, students are encouraged to search for their own resources.

Instructional Format

Workshop and regular check-in meetings

Assessment

Planning and production of a mini-documentary

VPR3004 Project Management

3000 Project

5 ECTS, Fall Semester, Period 3

Course Coordinator

Gert Poppe, University College Venlo, FSE, Maastricht University

Contact: gert@poppe.nl

Pre-requisites

- ✓ None

Recommendations

- ✓ None

Objectives

Description of the course

The importance of project management nowadays cannot be overstated. Introducing an innovative product in the market, organising a music festival or developing a new software tool... these are all complex, interdisciplinary and time-constrained activities that can easily go off tracks and struggle with out of control budgets. Good project management helps teams to deliver on time and within budget, improves internal communication as well as communication with the stakeholders outside of the team and leads to better business decisions. Due to decreased time-to-market and the tendency towards flatter and leaner organisations, good project management skills have become increasingly important. In this course you will learn the essentials of project management and apply them in your own project. You will experience how it is to operate in a real project, monitor quality, time and money goals and deliver results.

Literature

TBA

Instructional Format

TBA

Assessment

TBA

VPR3103 PEERS – Undergraduate Research

3000 Project

5 ECTS, Spring Semester, Period 4 (VSK3101 PEERS - Undergraduate Research I), Period 5 (VSK3102 PEERS - Undergraduate Research II), Period 6 (VPR3103 PEERS – Undergraduate Research III)

Course Coordinator

Khrystyna Semen, University College Venlo, FSE, Maastricht University

Contact: k.semen@maastrichtuniversity.nl

Pre-requisites

- ✓ VSK3101 PEERS - Undergraduate Research I; VSK3102 PEERS - Undergraduate Research II

Recommendations

The PEERS project is preferably done during the second year (or the third year) of your study programme.

Objectives

- To further develop research skills starting from conceiving the good research question, identifying correct methodology to answer it, to actually conducting the study, analysing data and reporting the results to scientific community.
- To emphasize the ability to identify and formulate academic problems.
- To become aware how various research methodologies provide answers and may initiate new ideas.
- To enhance the learning experience of students by integrating research into their undergraduate curriculum.
- To reinforce the awareness of how academic work relates to the needs of society.

Description of the course

UCV PEERS is a semester research programme carrying 10 ECTS. In period 4 and 5, PEERS is delivered in a skills format while during period 6 it gets transformed to the full time research project. This set-up ensures that PEERS students increase their proficiency in all steps involved in conducting research, from writing a research proposal and making choices about the study methodology to communicating the results of their project. Small groups of students will conduct research under the guidance of a senior researcher. They will act as a group, but engage in individual work as well. PEERS offers a unique opportunity to develop one's own research topic. In this way, student researchers will make an actual contribution to ongoing research and will experience firsthand what is involved in doing research.

Literature

Project-specific literature will be used

Instructional Format

Research-Based Learning, group meetings and individual research

Assessment

The examination may vary and will depend on the nature of the conducted research, but will usually include:

- Presentation of the findings
- Research paper or report

VCA3000 Capstone

3000 Core Project

20 ECTS, Spring Semester

20 ECTS, Fall Semester

Course Coordinator

Khrystyna Semen, University College Venlo, FSE, Maastricht University

Emmy van den Heuvel, University College Venlo, FSE, Maastricht University

Contact: ucv-capstone@maastrichtuniversity.nl

Pre-requisites

Students should have at least 140 ECTS at the start of Capstone.

Recommendations

Participating in Capstone is doable, but demanding. Therefore, having a higher workload than usual (30 ECTS for one semester) due to e.g. additional courses, skills trainings and projects is not recommended.

Objectives

- To enable students to express their individual academic profile through a scholarly project during their last semester at the College.
- To further develop the ability to give an independent, systematic and clear treatment of a certain topic.
- To train the ability to independently identify and analyse relevant literature, theories and knowledge.
- To make systematic use of an appropriate selection of theories and methodologies in approaching questions and problems.
- To train the ability to independently acquire and handle academic knowledge through independent studies of relevant literature, and to cultivate the ability to critically evaluate and briefly account for the central elements in a large literature base.
- To assist senior students in the transition from undergraduate education to a master programme or the labour market.

Description of the course

The word capstone refers to a wedged stone connecting two sides of a curved stone bridge. Your capstone serves as a connection between the various important themes in your curriculum that you have followed at UCV. Capstone is the culmination of a student's academic work at UCV and is comparable in function to a bachelor thesis.

During this module students will work on writing a proposal in which they formulate their individual goals and determine a topic and format appropriate to their topic; students will independently search for a capstone/ research advisor; students will conduct the research primarily themselves; and their findings are going to be presented in a final piece of work (capstone). The capstone can take on a variety of forms and is not confined to a traditional research article/paper.

Literature

There is no preassigned literature for Capstone. Students will search for their own literature based on their capstone topic.

Instructional format

Individual work, tutorial group meetings/workshops, guidance from Capstone advisor and support hours.

Assessment

Students will be assessed pass/fail on a proposal and a presentation. Their final grade is based on two assessments, an outline and the final Capstone.

Courses at University College Maastricht & Maastricht Science Programme

It is possible for UCV students that already have obtained a positive Binding Study Advise to take courses at University College Maastricht and the Maastricht Science Programme and, provided they meet the prerequisites of those courses.

The UCM courses listed in this appendix are considered internal courses for purposes of graduation, meaning that they do not count towards the 60 ECT maximum for external education and that they do not have to be at the 3000-level. Students must register for these courses through the request form 'Courses elsewhere > Internal courses at UCM' on the Campus Venlo intranet request form page. The request will automatically be forwarded to the UCM Office of Student Affairs, where the course will be booked and made visible in the Student Portal two weeks prior to the start of the education. However, UCV cannot guarantee that there is no clash of schedules between these courses and the courses offered at UCV.

These courses are not available to exchange students.

UCM courses not listed in the appendix, and all MSP courses are considered external education and have to be requested via the request form 'Courses elsewhere > External courses at UM' on the Campus Venlo intranet request form page and via the 'special course approval' booking module in the Student Portal.

Please indicate backup courses on the course registration form.

Important note

Courses that are marked as "Yes, as Humanities module", "Yes, as Sciences module" or "Yes as Social Sciences module" can be taken freely, following the procedure mentioned above.

UCM courses (may) also have prerequisites. To ensure that you meet these prerequisites, it is important you discuss the compatibility of your followed curriculum to the desired prerequisites with your academic adviser prior to registering for UCM courses. You may need to ask for a prerequisite waiver. Please note that this prerequisite waiver needs to be submitted to UCM before the course registration deadline, so start in time.

In all cases, the registration of these courses should occur only after a sound curriculum planning form has been created in agreement with the academic adviser. Your academic adviser will be able to help you figure out whether your course selection is feasible from a scheduling point of view.

More information

UCV Office of Academic Advising

Karin Lenssen, campusvenlo-advising@maastrichtuniversity.nl

UCM Office of Academic Advising

Lonneke Bevers, Wilfred van Dellen, ucm-academicadvising@maastrichtuniversity.nl

MSP Office of Academic Advising

Christopher Pawley, mssp-academicadvising@maastrichtuniversity.nl

Period 1

Courses

| Course Code | Course Title | Owner | UCV allowed |
|-------------|---|-------|--------------------------------|
| HUM1007 | Introduction to Philosophy | UCM | Yes, as Humanities module |
| HUM1011 | Introduction to Art; Representations, Performances and Interactions | UCM | Yes, as Humanities module |
| HUM1012 | Pop Songs and Poetry: Theory and Analysis | UCM | Yes, as Humanities module |
| HUM2003 | The Making of Crucial Differences: 'Race', Sexuality, Gender, and Class in Historical Perspective | UCM | Yes, as Humanities module |
| HUM2005 | Enlightenment and Romanticism | UCM | Yes, as Humanities module |
| HUM2046 | Living in a Technological Culture: Introduction to Science and Technology Studies Part 1 | UCM | Yes, as Humanities module |
| HUM2058 | History of Contemporary Spirituality | UCM | Yes, as Humanities module |
| HUM3036 | Narrative Media | UCM | Yes, as Humanities module |
| HUM3043 | Acts of Literature: The Role of Prose, Poetry and Plays in a Changing World | UCM | Yes, as Humanities module |
| HUM3052 | Lifting The Iron Curtain | UCM | Yes, as Humanities module |
| SCI1010 | Basic Mathematical Tools | UCM | Yes, as Sciences module |
| SCI2002 | Discrete Mathematics | UCM | Yes, as Sciences module |
| SCI2011 | Introduction to Programming | UCM | Yes, as Sciences module |
| SCI2022 | Genetics and Evolution | UCM | Yes, as Sciences module |
| SCI2042 | Infectious Diseases and Global Public Health | UCM | Yes, as Sciences module |
| SCI3003 | Optimization | UCM | Yes, as Sciences module |
| SCI3007 | Endocrinology | UCM | Yes, as Sciences module |
| SSC1007 | Introduction to Law and Legal Reasoning | UCM | Yes, as Social Sciences module |
| SSC1029 | Sociological Perspectives | UCM | Yes, as Social Sciences module |
| SSC2002 | International Relations: Themes and Theories | UCM | Yes, as Social Sciences module |
| SSC2020 | The Economics of Information | UCM | Yes, as Social Sciences module |
| SSC2063 | The Psychology of Individual Differences: Personality and Intelligence | UCM | Yes, as Social Sciences module |
| SSC3030 | Law of the European Institutions | UCM | Yes, as Social Sciences module |
| SSC3036 | American Foreign Policy | UCM | Yes, as Social Sciences module |
| SSC3054 | International Trade Law | UCM | Yes, as Social Sciences module |

Skills Training

| Course Code | Course Title | Owner |
|-------------|--|-------|
| SKI2085 | Ethnography and Qualitative Interviewing I | UCM |

Period 2

Courses

| Course Code | Course Title | Owner | UCV allowed |
|-------------|---|-------|--|
| HUM1010 | Common Foundations of Law in Europe | UCM | Yes, as Humanities module |
| HUM1013 | The Idea of Europe: the Intellectual History of Europe | UCM | Yes, as Humanities module |
| HUM2013 | The Presence of Art: Reinterpreting Modern and Contemporary Art | UCM | Yes, as Humanities module |
| HUM2057 | Religion, Myth, and Secularization | UCM | Yes, as Humanities module |
| HUM2059 | Data Analysis and Visualization for the Humanities and Social Sciences | UCM | Yes, as Humanities OR Social Sciences module |
| HUM2060 | Poetry, Poetry Theory and Poetry Practices | UCM | Yes, as Humanities module |
| HUM3014 | Philosophers of the 20th Century | UCM | Yes, as Humanities module |
| HUM3040 | Crucial Differences in the 21st Century | UCM | Yes, as Humanities module |
| HUM3049 | Science, Power and the Construction of Facts: Introduction to Science and Technology Studies Part 2 | UCM | Yes, as Humanities module |
| HUM3050 | A Cultural Critique of our Aging Society | UCM | Yes, as Humanities module |
| HUM3053 | The Idea of Africa | UCM | Yes, as Humanities module |
| SCI1005 | The Digital Enterprise | UCM | Yes, as Sciences module |
| SCI2018 | Calculus | UCM | Yes, as Sciences module |
| SCI2036 | Artificial Intelligence | UCM | Yes, as Sciences module |
| SCI3050 | Advances in Biomedical Science | UCM | Yes, as Sciences module |
| SSC1025 | Introduction to Political Science | UCM | Yes, as Social Sciences module |
| SSC2011 | European Integration: History and Theory | UCM | Yes, as Sciences OR Social Sciences module |
| SSC2025 | Memory | UCM | Yes, as Sciences OR Social Sciences module |
| SSC2028 | Classical Social Theory | UCM | Yes, as Social Sciences module |
| SSC3032 | Atrocity Triangle: a Course on the Criminology of Gross Human Rights Violations | UCM | Yes, as Social Sciences module |
| SSC3041 | Economics and Society in Contemporary Asia | UCM | Yes, as Social Sciences module |
| SSC3047 | Urbanisation, Development and Poverty | UCM | Yes, as Social Sciences module |
| SSC3049 | Human Rights: Principles and Polemics | UCM | Yes, as Social Sciences module |

Skills Training

| Course Code | Course Title | Owner |
|-------------|---|-------|
| SKI3002 | Argumentation II | UCM |
| SKI3052 | Ethnography and Qualitative Interviewing II | UCM |

Period 3

Projects

| Course Code | Course Title | Owner |
|-------------|--|-------|
| PRO2003 | Writing Project: 'The journal' | UCM |
| PRO3009 | Ethnography and Qualitative Interviewing III | UCM |

Period 4

Courses

| Course Code | Course Title | Owner | UCV allowed |
|-------------|--|-------|--------------------------------|
| HUM1003 | Cultural Studies I: Doing Cultural Studies | UCM | Yes, as Humanities module |
| HUM1016 | Telling Stories | UCM | Yes, as Humanities module |
| HUM2018 | Cultural Diversity in a Globalizing World | UCM | Yes, as Humanities module |
| HUM2021 | Medieval Civilization: Making the Middle Ages Relevant | UCM | Yes, as Humanities module |
| HUM2047 | The Future of Literature? | UCM | Yes, as Humanities module |
| HUM2051 | Philosophical Ethics | UCM | Yes, as Humanities module |
| HUM2054 | Back to the Philosophers Themselves! | UCM | Yes, as Humanities module |
| HUM3019 | Totalitarian Temptation | UCM | Yes, as Humanities module |
| HUM3029 | Literature, Art and Psychology | UCM | Yes, as Humanities module |
| HUM3044 | Philosophy of Language | UCM | Yes, as Humanities module |
| HUM3051 | Medical Humanities: Bodies & Minds, Histories of the Normal and the Pathological | UCM | Yes, as Humanities module |
| SCI2010 | Introduction to Game Theory | UCM | Yes, as Sciences module |
| SCI2031 | Immunology | UCM | Yes, as Sciences module |
| SCI2037 | Cell Biology | UCM | Yes, as Sciences module |
| SCI3006 | Mathematical Modelling | UCM | Yes, as Sciences module |
| SSC1007 | Introduction to Law and Legal Reasoning | UCM | Yes, as Social Sciences module |
| SSC2006 | Developmental Psychology | UCM | Yes, as Social Sciences module |
| SSC2037 | Peace and Conflict Studies | UCM | Yes, as Social Sciences module |
| SSC2039 | History of Western Political Thought | UCM | Yes, as Social Sciences module |
| SSC2060 | Comparative Constitutional Law | UCM | Yes, as Social Sciences module |
| SSC2064 | Migration Studies: Flows and Concepts | UCM | Yes, as Social Sciences module |
| SSC3009 | Public Economics | UCM | Yes, as Social Sciences module |
| SSC3012 | War in World Politics | UCM | Yes, as Social Sciences module |
| SSC3013 | Social Movements | UCM | Yes, as Social Sciences module |
| SSC3023 | Philosophy of Mind | UCM | Yes, as Social Sciences module |
| SSC3038 | Contemporary Social Theory | UCM | Yes, as Social Sciences module |

Skills Training

| Course Code | Course Title | Owner |
|-------------|--------------------------|-------|
| SKI2005 | Back to the Sources | UCM |
| SKI2077 | Lab Skills: Cell Biology | UCM |

Period 5

Courses

| Course Code | Course Title | Owner | UCV allowed |
|-------------|--|-------|--|
| HUM2007 | States and Nations in Europe, from the Middle Ages to the First World War | UCM | Yes, as Humanities module |
| HUM2008 | Ancient Philosophy | UCM | Yes, as Humanities module |
| HUM2030 | Media and Technology; Philosophical Perspectives | UCM | Yes, as Humanities module |
| HUM2031 | Cultural Studies II: Visual Cultures | UCM | Yes, as Humanities module |
| HUM2056 | Cultural Memory and the Politics of Visualizing the Past | UCM | Yes, as Humanities module |
| HUM3034 | World History | UCM | Yes, as Humanities module |
| HUM3042 | Biopoetics: An Evolutionary Approach to Art, Literature, Music and Religion | UCM | Yes, as Humanities module |
| HUM3045 | Distributive Justice in Contemporary Political Philosophy | UCM | Yes, as Humanities module |
| SCI2019 | Linear Algebra | UCM | Yes, as Sciences module |
| SCI2044 | Logic | UCM | Yes, as Sciences OR Social Sciences module |
| SCI3046 | Cognitive Neuroscience | UCM | Yes, as Sciences module |
| SCI3049 | Applied Immunology and Oncology | UCM | Yes, as Sciences module |
| SCI3051 | Data Analytics | UCM | Yes, as Sciences OR Social Sciences module |
| SSC2004 | Clinical Psychology | UCM | Yes, as Social Sciences module |
| SSC2027 | Law and Society | UCM | Yes, as Social Sciences module |
| SSC2043 | Development Economics | UCM | Yes, as Social Sciences module |
| SSC2050 | Psychology and Law | UCM | Yes, as Social Sciences module |
| SSC2065 | Theories of Social order | UCM | Yes, as Social Sciences module |
| SSC3002 | European Foreign Policy | UCM | Yes, as Social Sciences module |
| SSC3003 | The Law of the United Nations | UCV | Yes, as Social Sciences module |
| SSC3019 | Human Reasoning and Complex Cognition | UCM | Yes, as Social Sciences module |
| SSC3040 | Identities | UCM | Yes, as Social Sciences module |
| SSC3051 | Contemporary Critical Security Studies | UCM | Yes, as Social Sciences module |
| SSC3052 | The Aftermath of Atrocity: a Course on Transitional Justice and Post-Conflict Reconstruction | UCM | Yes, as Social Sciences module |

Skills Training

| Course Code | Course Title | Owner |
|-------------|---------------------------|-------|
| SKI2079 | Human Anatomy & Histology | UCM |

Period 6

Projects

| Course Code | Course Title | Owner |
|-------------|--------------------------------|-------|
| PRO2003 | Writing Project: 'The journal' | UCM |