# COURSE CATALOGUE 2025-2026

2025-2026 | University College Venlo

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# General Information

## Curriculum Requirements

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

**IMPORTANT**: Former core course VCO1004 Globalisation has been replaced with VCO1005 Information Literacy as of the academic year 2024-2025. For students who have passed the 'old' core course VCO1004 Globalisation, these results will be valid until graduation. Students who have failed VCO1004 Globalisation, have to take VCO1005 Information Literacy to meet the graduation requirements.

## Disclaimer

The course and skills descriptions provided herein are for the guidance of 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 Knowledge | 1 |
| VSC1101 | Course | 1000 | Introduction to Biology | 1 |
| VSC1201 | Course | 1000 | Introduction to Public Health | 1 |
| VSC2205 | Course | 2000 | Nutrition and Metabolism | 1 |
| VSC2208 | Course | 2000 | Sensory Science | 1 |
| VSC3101 | Course | 3000 | Gut Microbiology | 1 |
| VSC3206 | Course | 3000 | Nutritional Pharmacotherapy | 1 |
| VSC3502 | Course | 3000 | Planetary Health | 1 |
| VSS1101 | Course | 1000 | Introduction to Psychology | 1 |
| VSS1201 | Course | 1000 | Introduction to Business Administration | 1 |
| VSS2105 | Course | 2000 | Social Psychology | 1 |
| VSS3502 | Course | 3000 | EU Environmental Food Law & Policy - **not offered 2025-2026** | 1 |
| VSK1001 | Skills Training | 1000 | Introduction to Academic Skills | 1 |
| VSK2004 | Skills Training | 2000 | Academic Writing | 1 |
| VSK2013 | Skills Training | 2000 | Nutritional Assessment | 1 |
| VSK2015 | Skills Training | 2000 | Lab Skills: Good Laboratory Practice | 1 |
| VSK2016 | Skills Training | 2000 | Advanced Logic | 1 |
| VCO1005 | Course | 1000 | Information Literacy | 2 |
| VHU2001 | Course | 2000 | Normative Dimension of Sustainability | 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 |
| VSC3204 | Course | 3000 | Food Safety | 2 |
| VSC3207 | Course | 3000 | Sports Nutrition and Physiology | 2 |
| VSS2101 | Course | 2000 | Psychology of Eating | 2 |
| VSS2203 | Course | 2000 | Finance and Investments | 2 |
| VSS3101 | Course | 3000 | Performance Psychology in Sports and Business | 2 |
| VSS3301 | Course | 3000 | Social and Environmental Entrepreneurship | 2 |
| VSK1002 | Skills Training | 1000 | Research Methods I: Quantitative Research | 2 |
| VSK2003 | Skills Training | 2000 | Lab Skills: Biomolecular Techniques | 2 |
| VSK2009 | Skills Training | 2000 | Leadership Skills | 2 |
| VSK2010 | Skills Training | 2000 | Creativity & Concept Development of New Business | 2 |
| VSK2012 | Skills Training | 2000 | Integrated Sustainability Assessment of Climate Change | 2 |
| VSK2014 | Skills Training | 2000 | Interviewing I | 2 |
| VPR1005 | Project | 1000 | Research Methods II: Qualitative Research | 3 |
| VPR2001 | Project | 2000 | Writing a Research Proposal | 3 |
| VPR2002 | Project | 2000 | Academic Debate | 3 |
| VPR2005 | Project | 2000 | Interviewing II | 3 |
| VPR3004 | Project | 3000 | Project Management | 3 |

| | | | | |
|---|---|---|---|---|
| VCO1003 | Course | 1000 | World Orientation: An Introduction to Cultural Studies | 4 |
| VHU1002 | Course | 1000 | Digital Technology and Culture | 4 |
| VSC1501 | Course | 1000 | Sustainable Development: Human Impact on the Earth System | 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 |
| VSC2501 | Course | 2000 | Climate Change | 4 |
| VSC3102 | Course | 3000 | Healthy Life Cycle | 4 |
| VSC3201 | Course | 3000 | Clinical Nutrition | 4 |
| VSC3202 | Course | 3000 | Health Education and Communication | 4 |
| VSC3501 | Course | 3000 | Sustainable Food Production | 4 |
| VSS2206 | Course | 2000 | Supply Chain Management | 4 |
| VSS3102 | Course | 3000 | Taste | 4 |
| VSK1000 | Skills Training | 1000 | The Applied Researcher I | 4 |
| VSK2002 | Skills Training | 2000 | Lab Skills: Protocol Design | 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 |
| VCO1002 | Course | 1000 | Philosophy of Science | 5 |
| VHU1001 | Course | 1000 | Ethics | 5 |
| VSC2105 | Course | 2000 | Microbiology | 5 |
| VSC2108 | Course | 2000 | Human Pathobiology | 5 |
| VSC2203 | Course | 2000 | Food Technology and Processing | 5 |
| VSC2209 | Course | 2000 | Global Health Nutrition | 5 |
| VSC2305 | Course | 2000 | Intermediate Statistical Methods and Data Analysis | 5 |
| VSC3203 | Course | 3000 | Food Innovation | 5 |
| VSC3208 | Course | 3000 | Food and Disease | 5 |
| VSC3302 | Course | 3000 | Bioinformatics | 5 |
| VSS1503 | Course | 1000 | Foundations of EU Law and Policy – **not offered 2025-2026** | 5 |
| VSS2102 | Course | 2000 | Behaviour Change | 5 |
| VSS2301 | Course | 2000 | Entrepreneurship | 5 |
| VSS3202 | Course | 3000 | Consumer Behaviour | 5 |
| VSK1004 | Skills Training | 1000 | The Applied Researcher II | 5 |
| VSK2006 | Skills Training | 2000 | Clinical Lab Skills | 5 |
| VSK2008 | Skills Training | 2000 | Visualization and Data Storytelling | 5 |
| VSK3004 | Skills Training | 3000 | Science Communication I | 5 |
| VSK3005 | Skills Training | 3000 | Food Product Development | 5 |
| VSK3102 | Skills Training | 3000 | PEERS - Undergraduate Research II | 5 |
| VPR1002 | Project | 1000 | The Applied Researcher III | 6 |
| VPR2004 | Project | 2000 | Strategic Marketing and Practice | 6 |
| VPR3002 | Project | 3000 | Think Tank | 6 |
| VPR3003 | Project | 3000 | Science Communication II | 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
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### 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

Upon completing this course, students can:

- Recall and describe the fundamental characteristics of models used in different disciplines in the natural and social sciences, including their purpose, variables and limitations;
- Can demonstrate comprehension of the underlying principles of modelling by analysing and interpreting relationships between variables within different types of models used in natural and social sciences;
- Reflect on and compare modelling approaches across disciplines, evaluating their strengths, limitations, and suitability for different types of questions;
- Apply relevant models and modelling to understand, explain or predict phenomena encountered in everyday life.

### Description of the course

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. However, we always need to be aware that models have specific limitations, and we have to use them wisely.

The core course Modelling Nature is aimed at familiarising students with model systems that are used within the different disciplines of Sciences and Social Sciences. Following a broad introduction to models and modelling, cases will address different types of models in e.g. life sciences and behavioural sciences in more depth. Case studies will illustrate the usefulness of these models in various contexts. Students will be exposed to different models used both in academia and everyday thinking, to foster 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. (2020). Theory Construction and Model-Building Skills – A Practical Guide for Social Scientists, 2nd edition. New York: The Guillford Press.
Additional materials (original research articles and relevant knowledge clips) will be made available on Student Portal.

## Instructional Format

Lectures, workshops and tutorial meetings

## Assessment

- 60% of grade: Written final exam (open questions).
- 40% of grade: Written assignment.

## VCO1002 Philosophy of Science

*1000 Core Course*

5 ECTS, Spring Semester, Period 5

### Course Coordinators

Remco Havermans, University College Venlo, FSE, Maastricht University
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### 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
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### 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.

## VCO1005 Information Literacy

*1000 Core Course*

5 ECTS, Fall Semester, Period 2

### Course Coordinator

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Mitchell Kiefer, University College Venlo, FSE, Maastricht University
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### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

Students will learn to:

- Develop a skeptical mind towards presented information from different sources
- Recognize good and bad reasoning
- Detect misinformation
- Use appropriate data for different research questions (qualitative and quantitative) and evaluate if others have appropriately used data
- Think like a scientist: recognize biases and assumptions in processing information
- Understand different types of truths and untruths/recognize true and untrue information

### Description of the course

A key aspect of studying at university and later on working at university level, is the correct and critical appraisal of scientific as well as non-scientific information. This course will teach about different aspects of information literacy, such as judging the value of an argument, recognizing misinformation and fallacies in reasoning (e.g. confirmation bias, hindsight bias, heuristics). Both qualitative and qualitative data and documents will be studied, to learn that different research questions require different types of data and value the provided information in a correct way. To be well prepared for the future, the course will also pay attention to the growing amount of information provided via artificial attention, bringing new challenges in correctly valuing information.

Key words:

- Skepticism
- Critical thinking
- Argumentation
- Data literacy
- Information literacy
- Inductive and deductive reasoning

### Literature

E-reader

### Instructional Format

PBL, Journal Clubs

## Assessment

Journal Club assignments, final exam

# Humanities Courses

## VHU1001 Ethics

*1000 Humanities Course*

5 ECTS, Spring Semester, Period 5

### Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University
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### 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

*Understanding Ethics*, by Torbjörn Tännsjö
E-Reader

### Instructional Format

PBL format

### Assessment

Paper (65%)
Presentation (35%)

## VHU1002 Digital Technology and Culture

*1000 Humanities Course*

5 ECTS, Spring Semester, Period 4

### Course Coordinator

Charles van Leeuwen, Literature & Art, FASoS, Maastricht University
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### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

- Students will have an introductory overview of trends and developments in the field of digital media and robotics, from the perspective of the humanities /social sciences
- Students will understand the transformations people experience with respect to the use of digital media and technology
- Students will develop an opinion about digitalization processes and their impact on people and society and they will train in presenting this judgement
- Student will learn to analyse issues and specific cases in digital culture and digital behaviour, applying some important concepts and theories from digital studies

### Description of the course

Students in this course will be introduced into the broad field of digital media and technology and discuss in detail computer based practices and robotic practices (from a perspective of the humanities and social sciences). The topics discussed range from technological developments and transformations in our digital cultures 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.

Digitalisation has a profound impact on our society. Digitalization refers not only to the process of converting analogue information into digital format (we rather call this digitisation) but to integrating digital technologies into various aspects of society, culture, and daily life. We can observe changes in many different areas. What digital media do, what they look like and how they relate to each other and to older media is not identical worldwide, but dependent on local practices as well. It involves the use of digital tools and technologies with the promise to enhance efficiency, accessibility, and connectivity. We will discuss whether this is indeed the case.

The widespread adoption of digitalization has transformed all aspects of our lives. It has led to the creation of digital platforms, online services, and data-driven decision-making. It has transformed the functioning of media, markets and political institutions. It has changed the way we work, study, communicate, eat and sleep. However, transformations are not unequivocal. New possibilities in our digital cultures arise but also new inequalities, as the access and competencies needed for participation, are not evenly distributed. The platforms that allow for participation also harbour new mechanisms of control, surveillance and selection. The pace and diversity of these developments ask for continuous investigation and reflection. In particular, the course addresses the following topic domains:

- digitalization processes in culture and society
- technological mediation and imaginaries
- robotics & human-robot interaction
- digital technology, AI and ethics
- digital art and music in times of AI
- digital communication, digital detox and mental health
- digital practices of remembering and mourning
- digital literacy and digital divides
- digital citizenship and political action

For each academic and professional, it will be important to understand how different groups make different use and sense of digital technologies. One day it may be your task to introduce your students, patients, customers, citizens, readers, etc. into the use of specific digital tools, and to mediate conflicts about their functionalities, design and social and cultural impact.

### Literature

The literature is available online and via the reference list of the University Library. The course will be structured around a systematic reading of the following handbook: Lindgren, S. (2022), *Digital Media and Society*, 2nd edition. Sage. This reading gives you a solid historical and conceptual overview of current trends in digital society.

### Instructional Format

Short lectures, tutorial group meetings, viewing of several movies and documentaries.

### Assessment

Two short presentations in class (40%), and a final written exam (60%) about the course topics.

## VHU2001 Normative Dimension of Sustainability

*2000 Humanities Course*

5 ECTS, Fall Semester, Period 2

### Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University
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### 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 Knowledge

*2000 Humanities Course*

5 ECTS, Fall Semester, Period 1

### Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University
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### Pre-requisites

- ✓ None

### Recommendations

VCO1002 Philosophy of Science

### Objectives

- Identify and analyze key theories and debates in historiography;
- Understand key historical explanations of the genesis, movement, and changing of scientific ideas and knowledge;
- 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? The course explores 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 (or not credited) with developing new theories, technologies, and ways of thinking. 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 afford us different types of understandings of the past. Throughout the course, we will utilize concepts from history and philosophy of science, science and technology studies, cultural studies, and related disciplines to shed light on our guiding question: what is the history of knowledge?

### Literature

E-Reader consisting of primary and secondary sources

### Instructional Format

PBL sessions (two per week) for the first 3 weeks; the final 3 weeks run as a 'book club'

### Assessment

Midterm exam (30%)
Final Paper (70%)

# 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
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### 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 into the basic human biological concepts.
- To gain insight into 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.). 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 mini project and a mid-term 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, Human Pathobiology, Food and Disease

## VSC1201 Introduction to Public Health

*1000 (Life) Science; Social Science Course*

5 ECTS, Fall Semester, Period 1

### Course Coordinator

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*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, Food Safety

## VSC1303 Introduction to Statistical Methods and Data Analysis

*1000 (Life) Science; Social Science Course*

5 ECTS, Fall Semester, Period 2

### Course Coordinator

Miriam Urlings, Food Claims Centre Venlo, Faculty of Science and Engineering, Maastricht University
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Martin Bader, System Earth Science, Faculty of Science and Engineering, Maastricht University
*Contact*: martin.bader@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 basic knowledge on inferential statistics

### Description of the course

This course “Introduction to Statistical Methods and Data Analysis” 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 data, 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 data. In 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. In terms of teaching activities, the course provides lectures in combination with tutorials to study the theory in relation to realistic cases, R workshops to gain practical experience in carrying out statistical analyses and journal clubs to practice critical interpretation of statistical information as reported in academic publications.

### Literature

- Andy Fields; Discovering Statistics Using R; Sage Publications Ltd
- Martin Bader & Sebastian Leuzinger, R-ticulate – A Beginner's Guide to Data Analysis for Natural Scientists, 2024 John Wiley & Sons, Inc.

### Instructional Format

Lectures
Tutorial meetings (case discussions, R workshops and journal clubs)

### Assessment

- Oral presentation
- Final open book exam

## VSC1401 Introduction to Chemistry

*1000 (Life) Science Course*

5 ECTS, Fall Semester, Period 2

### Course Coordinator

Cyriel Mentink, FSE, Maastricht University
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### 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, Lab Skills: Protocol Design

## VSC1501 Sustainable Development: Human Impact on the Earth System

*1000 (Life) Science; Social Science Course*

5 ECTS, Spring Semester, Period 4

### Course Coordinator

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

Climate Change, Sustainable Food Production, Planetary Health, 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 lectures

## 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 Livingston.
- 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%); closed questions 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

### Instructional Format

Lectures and tutorial meetings

### Assessment

Midterm (30%) and end term examination (70%); closed questions 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

Remco Havermans, University College Venlo, FSE, Maastricht University
*Contact:* r.havermans@maastrichtuniversity.nl

### Pre-requisites

- ✓ None

### Recommendations

The course is open for all students, however, a background 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

## VSC2108 Human Pathobiology

*2000 (Life) Science Course*

5 ECTS, Spring Semester, Period 5

### Course Coordinator

Khrystyna Semen, University College Venlo, FSE, Maastricht University
*Contact*: k.semen@maastrichtuniversity.nl

### Pre-requisites

- ✓ None

### Recommendations

It is strongly recommended to complete the course:

- ✓ VSC1101 Introduction to Biology

### Objectives

- To recognize the patterns of response of cells to injury
- To recognize and explain the key structural features and pathological alterations observed in tissue samples
- To describe the structural and functional connections between organs and organ systems in disease conditions
- To identify the causes of disease
- To describe relevant molecular alterations and recognize intervention points for therapy including diet
- To practice the skills that enable the delivery of clear, coherent, and persuasive presentations and facilitate constructive discussion

### Description of the course

This course intends to introduce students with a non-medical background to the basics of human pathobiology. It will start with an overview of the general pathological processes such as cell injury, cell death, cell survival, inflammation and tissue degeneration. Subsequently, common disorders of the cardiovascular and respiratory systems will be discussed. Special attention will be given to the pathogenesis of the diseases, specifics of the organ's involvement and potential links with clinical presentation. The disease pathobiology will be discussed in connection with the existing treatment approaches including pharmacotherapy as well as diet.

### Literature

- Abbas, A. K.; Aster, J. C. Robbins & Cotran Pathologic Basis of Disease, Tenth edition.; Kumar, V., Ed.; Elsevier: Philadelphia, PA, 2021
- Robbins, S. L. Robbins & Kumar Basic Pathology, Eleventh edition.; Kumar, V., Abbas, A. K., Aster, J. C., Deyrup, A. T., Das, A., Eds.; Elsevier: Philadelphia, PA, 2023.

### Instructional Format

PBL, lectures, workshops

### Assessment

Mid-term exam, presentation

## VSC2201 Epidemiology of Food; The Relationship Between Food and Health

*2000 (Life) Science Course*

5 ECTS, Spring Semester, Period 4

### Course Coordinator

Alexander Umanets, FSE, Maastricht University
*Contact:* a.umanetc@maastrichtuniversity.nl

### Pre-requisites

- ✓ VSK1002 Research Methods I: Quantitative Research

### 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

## VSC2203 Food Technology and Processing

*2000 (Life) Science Course*

5 ECTS, Spring Semester, Period 5

### Course Coordinator

TBA

*Contact:* campusvenlo-osa@maastrichtuniversity.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

Milena Pavlova, Health Services Research, FHML, Maastricht University
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### Pre-requisites

- ✓ None

### Recommendations

VSC1201 Introduction to Public Health

### Objectives

Three broad objectives are addressed:

1. issues in public health: What is the importance of the public health system in a country in setting public health policies? Why is it essential to monitor and address health inequalities in public health through policy?
2. issues in public policymaking: How does public health policymaking work in reality under crisis circumstances, like infectious disease outbreaks? And how does public health policymaking work in reality under non-acute circumstances where a shift in responsibility can be seen from government (central steering) to governance (decentral steering)?
3. issues in public policymaking on public health: Special attention will be paid to the role of technology in public health and the importance of economic evaluation in public policymaking, raising ethical and solidarity issues.

### Description of the course

In this multi-disciplinary course about public health and public policymaking, students will combine insights from political science, public health advocacy, medical sociology, health economics, health ethics, and digital technology to address challenging public health topics, such as outbreaks, vaccination, chronic diseases and healthy lifestyles.
Next to lectures and tutorials, the course offers the opportunity for project work where students select and analyze a real-world public health policy problem, considering contextual factors related to the public health system, governance and stakeholders. Based on their analysis, students propose evidence-informed policy, present their findings, and debate with other students on the proposed policy.

### Literature

- An e-reader with original articles will be available at the start of the course.
- Buse K, Mays N et al. Making Health Policy (3rd edition). Berkshire: Open University Press, 2023.
- Maarse, H. Health Policy Analysis: An Introduction. 2023. https://doi.org/10.26481/mup.2303

### Instructional Format

Lectures accompanied with associated tutorial group meetings and workshops (group project work).

### Assessment

A group presentation with in-depth debate based on the group project work (weight 40%) and an individual written exam at the end of the course (weight 60%)

## 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 influence 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 occur 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 lange 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, Healthy Life Cycle, Food and Disease

## 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
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### 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)

## VSC2208 Sensory Science

*2000 (Life) Science Course; Social Science Course*

5 ECTS, Fall Semester, Period 1

### Course Coordinator

Alvaro Garcia Fuentes, University College Venlo, FSE, Maastricht University
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### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

At the end of this course students are able to:

- Explain the biological, molecular, and neural mechanisms underlying human sensory perception.
- Select, design and implement sensory evaluation tests to address research questions related to sensory perception, product development, and quality improvement.
- Critically analyze interdisciplinary research in sensory science to link sensory perception phenomena to underlying physiological processes and consumer responses.

### Description of the course

Sensory science is an interdisciplinary field of inquiry for measuring and understanding human responses to product features and attributes as perceived by the senses, such as sight, smell, taste, touch, and hearing. In this course you explore the physiology of sensory perception, the science behind sensory evaluation methods, and the application of these techniques with a focus on (but not limited to) its applications in food research (new product development, benchmark testing, quality assessment, etcetera). Through a combination of theoretical knowledge and practical applications, you will gain a comprehensive understanding of how sensory science contributes to the development, improvement, and marketing of (food) products.

### Literature

Lawless, H. T., & Heymann, H. (2010). Sensory Evaluation of Food: Principles and Practices. Springer.
Meilgaard, M. C., Civille, G. V., & Carr, B. T. (2016). Sensory evaluation techniques. CRC Press.

### Instructional Format

Lectures, PBL tutorials and workshops

### Assessment

Weekly assignments, final project results presentation and a final exam

## VSC2209 Global Health Nutrition

*2000 (Life) Science Course; Social Science Course*

5 ECTS, Spring Semester, Period 5

### Course Coordinator

Karin Lenssen, University College Venlo, FSE, Maastricht University
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### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

Students will be able to...

- discuss global health nutrition issues in critical need for attention and identify determinants of nutrition inequities and global food security.
- distinguish nutritional needs of different vulnerable groups (e.g., mothers, infants, adolescents) and related adverse health outcomes of global public health relevance.
- differentiate between existing governmental and non-governmental organisation involved in global health nutrition and their responsibilities.
- review existing policies and action frameworks on global health nutrition issues.
- apply existing knowledge and theories on future challenges that may impact the field of global health and global nutrition therewith distinguishing between the different regions of world and relating relevant policies to this.
- explain how global health nutrition interventions are planned and discuss what factors may obstruct successful implementation.
- describe a current global health nutrition issue to a non-scientific audience and demonstrate how nutrition interventions could prevent, manage, and/or eliminate said issue.

### Description of the course

When it comes to nutrition, the global health perspective provides interesting insights. Where one region of the world is trying to fight an obesity pandemic, another part of the world has trouble feeding the population with nutritious food. Very different problems, but both with severe outcomes. In the course global health nutrition, you will dive into the topic of nutrition and health around the globe. By identifying the vulnerable groups, existing problems and previously executed interventions we will improve the understanding of the differences around the world. By combining this knowledge with existing governmental bodies and policies, you will learn to also view these known issues from the governance side. And what about the future? We already know some things that are coming towards us (climate change), but what if it is suddenly here (crisis management)?
You will approach the topics within public health nutrition and global health from an interdisciplinary perspective. As in traditional public health, you will combine biology, epidemiology, behaviour change and policy.

### Literature

A literature list will be provided on Canvas

### Instructional Format

Lectures & tutorials, challenge discussions

## Assessment

Challenge-based research proposal including participation and reflection (60%), team-based assessment (40%)

## 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, Faculty of Science and Engineering, Maastricht University
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Martin Bader, System Earth Science, Faculty of Science and Engineering, Maastricht University
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### re-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 became already acquainted with the basics of inferential statistics and simple statistical techniques to analyze data. Building on the statistical expertise gained during the introduction course (period 2), the current course will guide you through intermediate-level statistics. Key methods you will learn about are analysis of variance, analysis of covariance, multiple linear regression, logistic regression and survival analysis. With these techniques, a broad range of statistical analyses of various types of data can be conducted. In addition, you will learn how to carry out these analyses using the statistical software R. In terms of teaching activities, the course provides lectures combined with tutorials to study the theory in relation to realistic cases, R workshops to practice hands-on statistical analyses and journal clubs to practice interpretation and critical scrutiny of statistical information as reported in academic publications.

### Literature

- Andy Fields; Discovering Statistics Using R; Sage Publications Ltd
- Martin Bader & Sebastian Leuzinger, R-ticulate – A Beginner's Guide to Data Analysis for Natural Scientists, 2024 John Wiley & Sons, Inc.

### Instructional Format

Lectures
Tutorial meetings (case discussions, R workshops and journal clubs)

### Assessment

- Oral presentation
- Final open book exam

## 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
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### 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

## VSC2501 Climate Change

*2000 (Life) Science Course; Social Science Course*

5 ECTS, Spring Semester, Period 4

### Course Coordinator

Christopher O'Bryan, System Earth Science, FSE, Maastricht University
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### Pre-requisites

- ✓ VSC1501 Sustainable Development: Human Impact on the Earth System

### Recommendations

None

### Objectives

- To explore historic, current and future changes in our climate system.
- To review the uncertainties underlying (the modeling of) future climate change
- To examine some key impacts of climate change on human societies and natural systems.
- To explore climate mitigation and climate adaptation strategies (incl. Paris Agreement).

### Description of the course

Does it infuriate you when people consider the greenhouse effect to be a bad phenomenon? Do you know your 'RCP2.6' from your 'RCP8.5'? How about the relative importance of carbon dioxide and methane in terms of radiative forcing? Or the difference between climate-friendly and climate resilient? No? Join the club. Very few people understand the nuts and blots of climate science. And that is a real shame, because climate change is considered to be the greatest environmental threat humanity has ever faced. The Intergovernmental Panel on Climate Change (IPCC) states that the human influence on the climate system is clear. Continued emissions of greenhouse gases will cause further warming and changes in all components of the climate system. Limiting climate change will require substantial and sustained reductions of greenhouse gas emissions, while the need for adaptation to this new reality is increasingly being recognized.
The course will provide students with a sound understanding of the key drivers and processes of climate change. We will discuss the state-of-the-art climate science, examine some key impacts of (future) climate change, and explore what can be done to address the problem.

### Literature

TBA

### Instructional Format

TBA

### Assessment

TBA

## VSC3101 Gut Microbiology

*3000 (Life) Science Course*

5 ECTS, Fall Semester, Period 1

### Course Coordinator

Niels van Best, Medical Microbiology, Infectious Diseases and Infection Prevention, FHML, Maastricht University
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### Pre-requisites

- ✓ VSC1101 Introduction to Biology or equivalent

### Recommendations

VSC2105 Microbiology, and/or VSC3201 Clinical Nutrition, and/or VSC3208 Food and Disease

### Objectives

- To understand the various microbial ecosystems in the human body, in particular the gut, and explain their role in human health as well as their interaction with the immune system
- To analyse the link between lost microbial exposure and the rise in diseases
- To evaluate future solutions to treat and prevent infections and microbiome-mediated diseases
- To understand the principles and (dis)advantages if various (molecular) methods to study microbes and microbial ecosystems and interpret their outcomes
- To evaluate dietary interventions and/or functional foods that positively modulate the gut microbiota

### Description of the course

This course focuses on the microorganisms of the intestinal tract, mainly including bacteria. 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.
In addition, you will get hands-on experience with microbiology during lab visits and/or practical workshops.

### Literature

- 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.;
- special focus issue of Gut Microbes on the impact of diet on gut microbiota composition and function;
- The Human Intestinal Microbiome in Health and Disease. Lynch SV, Pedersen O.N Engl J Med. 2016 Dec 15; 375(24):2369-2379.;
- 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.;
- 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.
- Prescott's Microbiology/ 12th Edition by Joanne Willey and Kathleen Sandman and Dorothy Wood (ISBN 9781264088393)

### Instructional Format

Lectures, tutorial meetings, journal club, practical workshops / lab visits.

## Assessment

Midterm exam = oral group presentation; final exam = open questions

## VSC3102 Healthy Life Cycle

*3000 (Life) Science Course*

5 ECTS, Spring Semester, Period 4

### Course Coordinator

Karin Lenssen, University College Venlo, FSE, Maastricht University
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### Pre-requisites

- ✓ One of the following courses: VSC2201 Epidemiology of Food, VSC3208 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, VSS3101 Performance psychology in Sports and Business

### Recommendations

None

### Objectives

- Evaluate the influence of different processes (including their interactions) on one's health throughout the life cycle;
- Debate hypotheses about cause, correlation and effect in factors influencing longevity;
- Reflect upon mental and social health in relation to longevity and well-being;
- Assess differences between lifestyles that can contribute to a healthy life cycle in which processes, mechanisms and theories are used as the core of the arguments;
- Organise and synthesise information from sources to fully achieve a specific purpose with clarity and depth, and develops a strategy through which to disseminate the obtained knowledge;
- Engages peers in ways that facilitate their contributions to meetings by both constructively building upon or synthesizing the contributions of others as well as noticing when someone is not participating and inviting them to engage;
- Evaluate and use relevant and compelling content to illustrate mastery of the subject, conveying their understanding and shaping the whole work.

### 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. In the course we dive deeper into the lifestyle for healthy ageing with a focus on the complexities in studying such lifestyle factors. We will face the complexities of measuring simple concepts and try to give meaning to the existing body of evidence. 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, 30% of final grade), knowledge clip (individual, 20% of final grade) and final paper (individual, 50% of final grade)

## 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, VSC3208 Food and Disease

### Objectives

- To examine the impact of dietary and lifestyle factors on age-related diseases in humans
- To understand how nutrition prevents diseases by exploring underlying mechanisms
- To critically evaluate a research article discussing dietary interventions in health/disease
- 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 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

TBA

*Contact:* campusvenlo-osa@maastrichtuniversity.nl

### Pre-requisites

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

### Recommendations

For this course knowledge of (health) 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 course focusses on the planned and systematic development of a health promotion programme using the Intervention Mapping approach and therefore the book on Intervention Mapping (see literature) 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

This course will learn you:

- The systematic development of health promoting interventions that focus on both individual-level behaviour change and changing the environment;
- To systematically develop a theory-based health promoting intervention by following the six-step Intervention Mapping approach (i.e., the focus will be on the developmental stage; step 1 to 4).
- To integrate theory, empirical evidence, and creativity in the development process.

### Description of the course

Unhealthy behavior is a main cause of avoidable disease and mortality. In the course 'Introduction to Public Health', you already learned that public health is influenced by factors at different environmental levels, namely the individual, interpersonal, organizational, community, and policy level. In turn, public health is best achieved by intervening beyond individual-level behavior. For instance, by changing the physical environment, the organization of care-facilities or law and legislation. This course is about planning such health promotion interventions in a systematic way. Specifically, by means of the Intervention Mapping approach. This is a versatile planning framework that is used for intervention development, implementation, and evaluation. This course will focus on the developmental phases (step 1 and 4) and briefly touch on implementation (step 5) and evaluation (step 6). By following a stepwise approach, you will develop a blueprint of an intervention using behavior change methods by working together in small groups.

### Literature

A copy of the Intervention Mapping book will be available in the UCV library (and digitally). The book provides all the information that is required to develop, implement, and evaluate health promotion interventions. 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 to snowball for relevant references on behavior change initiatives. Therefore, we strongly recommend students who have special interest in the topic of this course to buy the 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.

## Instructional Format

The course consists of:

- One weekly interactive practical's where you meet an expert in the field and work in small groups on your intervention (3 hours);
- One weekly tutorial where your group will pitch the work and receives feedback from the teachers (2 hours).

## Assessment

A presentation of the proposed intervention and a paper that includes your intervention plan based on the Intervention Mapping approach. The quality of the weekly pitch and the development of you presentation skills are also part of the final grade.

## VSC3203 Food Innovation

*3000 (Life) Science Course*

5 ECTS, Spring Semester, Period 5

### 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:
VSS2101 Psychology of Eating
VSC3208 Food and Disease
VSC2203 Food Technology and Processing
VSC2205 Nutrition and Metabolism
VSC2208 Sensory Science
VSS3202 Consumer Behaviour
VSC3204 Food Safety
VSC3501 Sustainable Food Production

### Objectives

By the end of this course, students can:

- Explain the role of food innovation within the broader food system, applying systems thinking to identify its challenges and opportunities.
- Analyze the scientific and technological foundations of food product development, including ingredient structure-function relationships and processing techniques.
- Apply interdisciplinary methods to develop and justify a food innovation framework that integrates theory, science, and market insight.
- Evaluate consumer, cultural, ethical, and sustainability factors that influence the design and acceptance of innovative food products.
- Simulate the use of a food innovation framework by proposing a food product derived from it.

### Description of the course

What does it take to develop innovative food products in a system under pressure—from climate change and health crises to shifting consumer values and technological disruption?
This advanced-level course explores food innovation as a complex, interdisciplinary process that draws on scientific knowledge, systems thinking, and social insight. Students will critically investigate how new food concepts are conceived, developed, and brought to market in an era of sustainability imperatives and rapid technological change. We will analyze topics including ingredient and processing innovation, food structure and functionality, digital food technologies, regulation and risk, and ethical and cultural considerations.
Through hands-on projects, problem-based learning, and creative simulation, students will develop and apply a personalized food innovation framework—a model for navigating uncertainty, driving ideation, and producing consumer-relevant solutions in one of the world's most dynamic industries.
Students are expected to build on knowledge acquired throughout their bachelor's studies and work intensively in teams to synthesize scientific and market perspectives, ultimately proposing innovative, responsible, and desirable food concepts.

### Literature

Literature will be published on Canvas.

### Instructional Format
Workshops, tutorials and lectures

### Assessment
Weekly assignments that will outline and construct a food innovation framework, final presentation of the framework, 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
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## Pre-requisites

- ✓ VSC2103 Pharmacology and Toxicology **and/or** VSC1201 Introduction to Public Health, or a course covering similar content

## Recommendations

None

## Objectives

Students will be able to…

- Critically assess policy objectives and existing regulatory frameworks governing food safety at local and (inter)national levels, identifying strengths, weaknesses and areas for improvement.
- Evaluate, design and justify risk management strategies to mitigate food safety hazards across the entire food supply chain, including production, storage, distribution and consumption.
- By integrating interdisciplinary knowledge from different fields related to food safety, propose innovative solutions to address emerging food safety challenges, considering evolving factors such as technological advancements, globalisation and changing consumer preferences.

## 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 ensure the safety of foods is becoming more important. This course focuses on the different aspects concerning safety in all stages of food production and consumption. Therefore, safety issues concerning the production, storage and distribution of foods as well as the control of these aspects with standards and regulations will be studied. Food safety hazards such as contamination, food authenticity and food defence issues will also be addressed.

## Literature

Original research articles

## Instructional Format

Interactive lectures, site visit or guest lecture, and tutorial meetings.

## Assessment

- Written exam (50%)
- Individual reflections (25%)
- Debate (25%)

## VSC3206 Nutritional Pharmacotherapy

*3000 (Life) Science Course*

5 ECTS, Fall Semester, Period 1

### Course Coordinator

Koen J.P. Verhees, PhD, University College Venlo, FSE, Maastricht University
*Contact:* koen.verhees@maastrichtuniversity.nl

### Pre-requisites

- ✓ VSC2103 Pharmacology and Toxicology

### Recommendations

VSC2104 Molecular Biology

### Objectives

- To provide general knowledge on pharmacotherapy for various diseases.
- To give insight in the possibilities to optimize pharmacotherapy with dietary components (nutrition) and food supplements.

### Description of the course

The course will start with an introduction on the role of reactive oxygen species (ROS) and oxidative stress in (chronic) disease. Subsequently, pharmacotherapeutical options for various diseases like cardiovascular diseases (hypertension, heart failure), lung diseases (asthma, COPD) and diabetes will be discussed. Furthermore, during this course the adaptive response in cells, inducing either repair mechanisms or enhanced protection after exposure to (low) doses of a toxicant will be investigated. In all these processes the role of nutrition and nutritional components (e.g. food supplements) 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);
- Bast and J.C. Hanekamp. Toxicology: What Everyone Should Know: A Book for Researchers, Consumers, Journalists and Politicians. Academic Press, Elsevier (2017);
- 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

This course will consist of lectures and tutorials.

### Assessment

The assessment will comprise writing a mini-review 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
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### Pre-requisites

- ✓ VSC2102 Homeostatic Principles

### Recommendations

Prior to starting this course, it is recommended to complete one of the following courses: VSC3208 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

## VSC3208 Food and Disease

*3000 (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

- ✓ VSC1101 Introduction to Biology

### Recommendations

VSC2205 Nutrition and Metabolism

### Objectives

To gain knowledge and insight in:

- Nutrition (macro and-micronutrients), bioactive substances, anti-oxidants
- Macronutrient digestion, partitioning and utilization
- 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 the role of organs, including the gut microbiome, adipose tissue, liver and muscle, as well the interorgan crosstalk in their etiology
- Impact of diet, lifestyle in the prevention of chronic metabolic diseases (mainly diet), including the role of energy restriction and intermittent fasting, non-caloric sweeteners and precision nutrition
- Basic principles of the measurement of dietary intake, dietary status, energy expenditure, substrate oxidation and insulin sensitivity

### Description of the course

This course covers briefly the basics of normal nutrition for optimal health outcomes and focusses on evidence-based diets in the prevention of chronic metabolic diseases. Participants will learn the fundamentals of nutrition science, nutrient partitioning, storage and utilization. Focus will be on the role of diet and dietary intervention 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* – 14th edition
- McArdle W.D., Katch F.I., Katch V.L - *Exercise Physiology: Nutrition, Energy and Human Performance* - 9th edition
- Frayn, Keith N - *Metabolic regulation: a human perspective* – 3rd edition - Wiley-Blackwell Oxford 2010
- Silverthorn, Dee Unglaub - *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 present how ta disturbances in metabolic pathways relate 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.

## VSC3302 Bioinformatics

*3000 (Life) Science Course*

5 ECTS, Spring Semester, Period 5

### Course Coordinator

Connie Drosinou, University College Venlo, FSE, Maastricht University
*Contact:* connie.drosinou@maastrichtuniversity.nl

### Pre-requisites

- ✓ VSC1101 Introduction to Biology **OR** VSC2104 Molecular Biology **AND**
- ✓ The Applied Researcher II (R workshops)

### Recommendations

Students are expected to have a good understanding of molecular biology concepts and processes.

### Objectives

- To understand fundamental principles of bioinformatics for modern molecular biological research.
- To explore biological databases and to navigate and utilize common biological databases such as GenBank, UniProt, and PDB.
- To describe the basic principles and concepts underlying bioinformatics, including sequence analysis, structural analysis, and systems biology.
- To analyze genomic, transcriptomics and proteomics data using bioinformatics techniques.
- To visualize and interpret bioinformatics data effectively using appropriate software tools.
- To explore limitations of bioinformatics output and methods.

### Description of the course

Bioinformatics is an interdisciplinary field at the intersection of computer science and biological science. This course provides an overview of key bioinformatics concepts, programs, and databases used in modern research to address challenges in genomics, transcriptomics, and proteomics.
Modern biological research increasingly relies on mathematical, statistical, and computational tools to analyze and synthesize large-scale data. These tools help integrate different types of biological information to answer specific research questions. To succeed in this course, students are expected to have a solid understanding of molecular biology, including the central dogma processes (replication, transcription, and translation), gene expression, and RNA processing, as well as familiarity with key biological terms such as nucleic acids, amino acids, genes, and protein synthesis.
Throughout the course, students will be introduced to **Conda** and **Biopython**, and will gain hands-on experience with computational tools critical for genomic research, including sequence alignment and structural bioinformatics. Practical exercises will allow students to apply these tools to real-world problems in bioinformatics.

### Literature

TBA

### Instructional Format

Lectures, tutorial sessions, practicals

### Assessment

The assessment of the course is designed as follows:

| Type of assignment | Weight | Type of assessment |
|---|---|---|
| Weekly mini-assessments | 25% | Individual assessment |
| Project Paper | 25% | Group assessment |
| Project Presentation | 50% | Group assessment |

## VSC3501 Sustainable Food Production

*3000 (Life) Science Course*

5 ECTS, Spring Semester, Period 4

### Course Coordinator

Madhura Rao, System Earth Science, FSE, Maastricht University
*Contact:* m.rao@maastrichtuniversity.nl

### Pre-requisites

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

### Recommendations

None

### Objectives

After attending the course, students should be able to:

- Critically analyze dominant and alternative models of food production.
- Apply systems thinking to assess the sustainability and regenerative potential of food production practices in diverse contexts.
- Design context-specific interventions that support just, resilient, and ecologically sound food systems.
- Reflect on personal and collective roles in shaping sustainable food futures through food choices, professional practices, and civic engagement.

### Description of the course

This course explores the principles, practices, and politics of sustainable and regenerative food production in a rapidly changing world. Drawing on interdisciplinary perspectives, students will critically examine how food is produced, who produces it, and under what conditions, with a strong focus on environmental, social, and ethical dimensions. Students will learn about alternative paradigms that challenge dominant industrial models of food production and consumption. Case studies from across the globe will be used to highlight diverse and context-specific approaches to sustainable food production.
For assessment, students will pick a commonly consumed food product and trace its journey from the farm to the fork. This will be done by interviewing relevant professionals and collecting information from literature. Students will then identify ways to improve the sustainability credentials of the chosen product and present their findings in class. Additionally, there will be a written assessment at the end of the course.

### Literature

Mandatory reading:

- Duncan, J., Carolan, M., & Wiskerke, J. S. (Eds.). (2021). *Routledge handbook of sustainable and regenerative food systems*. London: Routledge. [available open access on ResearchGate]

Recommended literature:

- Original research articles are recommended during the course.

### Instructional Format

Lectures and tutorial meetings

### Assessment

- Presentation
- Written assessment

## VSC3502 Planetary Health

*3000 (Life) Science Course*

5 ECTS, Fall Semester, Period 1

### Course Coordinator

Pim Martens, University College Venlo, FSE, Maastricht University
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### Pre-requisites

One of the following courses/skills

- VSC1501 Sustainable Development: Human Impact on the Earth System
- VSC2501 Climate Change
- VSC3501 Sustainable Food Production
- VSK2012 Integrated Sustainability Assessment of Climate Change

### Recommendations

None

### Objectives

At the end of this course, we expect you to be able to:

- Discuss Planetary Health as part of the broader discussions about the Anthropocene and Planetary Boundaries;
- Explain the basic mechanism and the underlying connection between the health of our Planet, Nature, Animals and Humans;
- Identify the key physical and mental health impacts related to functioning of Earth's natural systems;
- Explore different perspectives on Planetary Health, including indigenous perspectives;
- Discuss planetary-health friendly and resilient systems, and potential adaptation strategies, including (intergenerational) inequities and vulnerabilities;
- Identify strategies that foster hope and collaborative action to mitigate or adapt to climate change.
- Develop an Integrated Systems Perspective of Planetary Health, which requires to explore methods and concepts such as Nature Based Solutions.

### Description of the course

Human populations are healthier than ever before, but to achieve this we have exploited the planet at an unprecedented rate. On our current trajectory, we will put even more pressure on the Earth's natural systems. The so-called Great Acceleration of human activities and associated environmental impacts has significantly changed our natural systems and the human relationship with these systems. We are faced not only with climate change, but also with declining biodiversity, shortages of arable land and freshwater, pollution, and changing biogeochemical flows. We are dramatically affecting our global food production system, the quality of the air we breathe and of the water we drink, our exposure to infectious diseases, and even the habitability of the places where we live. There is increasing evidence of the diverse impacts of global environmental changes that are affecting global health on a large scale. Climate change, for example, has been referred to as "the biggest global health threat of the 21st century".

These changes in our global environmental systems pose significant challenges in view of sustainable development. They profoundly affect the earth's life-support systems and raise fundamental questions

how human beings relate to their natural environment and to other species. Hence, from a sustainable development perspective we need to meet the needs of the present, while safeguarding Earth's life-support system on which the health and wellbeing of current and future generations depends.

By the end of this course, you will be able to deconstruct the concept of planetary health, reflect on the central role of planetary health in the sustainable development debate, and assess some of the key methodological challenges (incl. interdisciplinary cooperation) in the field.

### Literature

The recommended text for all Martens, P. (2023). *Planetary Health: the recipe for a sustainable future*, University of Maastricht.
This will be supplemented by readings that will be made available to students before the respective lectures via the University's e-learning platform.

### Instructional Format

- PBL sessions
- Lectures, case studies, and interactive discussions
- Team-based research projects and hands-on activities
- Gaming and scenario-modelling exercises

### Assessment

- Essay on Planetary Health
- Written exam

# 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:

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 Strategy and Entrepreneurship, 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 elective 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 teamwork.

### Assessment

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

### This module may be a prerequisite/recommended for:

Supply Chain Management, Entrepreneurship, Social and Environmental Entrepreneurship

## VSS1503 Foundations of EU Law and Policy

*1000 Social Science Course*

5 ECTS Spring Semester, Period 5

**Course is offered every two years. Note that course is not offered in 2025-2026**

### Course Coordinator

Rick Schumans, International and European Law, Law, Maastricht University
*Contact:* rick.schumans@maastrichtuniversity.nl

### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

- To learn basic concepts of EU law and EU decision-making
- To gain insight in key EU policy fields and their legal instruments
- To gain a practical understanding on the relationship between the EU, the Member States, and individuals
- To analyse EU-based policies from a legal and institutional perspective

### Description of the course

This course provides an understanding on how the EU has evolved since it was established and how its actions affect individuals in important aspects of their daily life. Students will learn the legal foundations of the EU, the institutions that compose it, and their respective powers. After the study of the basic elements and actors of EU law, the course will address the regulation of relevant areas of activity, such as free movement of goods and persons, environmental policy, competition law and the like.

### Literature

Helen Wallace et al, Policy-Making in the European Union (OUP, 8th Ed., 2020), available as an e-book at UM Library and
Barnard & Peers, European Union Law (OUP, 3rd Ed., 2023); or
Craig & De Burca, EU Law – Text, Cases and Materials (8th Ed., 2024)

### Instruction format

Lectures and tutorial meetings

### Assessment

Written assignments and a written final exam

### This module may be a prerequisite/recommended for:

EU Environmental Law and Policy

## 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 written exam.

### This module may be a prerequisite/recommended for:

Taste, Food Innovation

## 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, Healthy Life Cycle, Health Education and Communication

## 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, Healthy Life Cycle, Health Education and Communication

## VSS2203 Finance and Investments

*2000 Social Science Course*

5 ECTS, Fall Semester, Period 2

### Course Coordinator

Sjoke Merk, Finance, SBE, Maastricht University
*Contact:* j.merk@maastrichtuniversity.nl

### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

- Gain comprehensive knowledge of investment and financing decisions crucial for corporate financial management.
- Develop practical skills in valuation techniques and portfolio management.
- Understand the role of emerging technologies (AI, blockchain, cryptocurrencies, fintech) in transforming financial markets.
- Enhance critical thinking through real-world financial cases, including crypto market dynamics, corporate strategies, and risk management.
- Prepare for professional roles in financial analysis, asset management, entrepreneurship, and strategic financial planning.

### Description of the course

Discover the dynamic world of finance with our innovative course: Finance and Investments (VSS2203)!
In a rapidly evolving financial landscape shaped by groundbreaking technologies like artificial intelligence, blockchain, cryptocurrencies, and fintech, understanding the complexities of investment and corporate finance has never been more exciting—or more essential.
Throughout this engaging and interactive course, you'll explore how modern businesses make crucial investment and financial decisions to maximize shareholder value. You'll unravel mysteries behind hot financial topics such as AI-driven investment portfolios, the booming crypto markets, and blockchain innovation.
What can you expect?

- Hands-on Learning: Interactive tutorials blending theory with real-world cases.
- Trend Integration: Deep dives into contemporary issues—cryptocurrencies, AI applications, fintech innovations, and recent market trends.
- Practical Skills: Master valuation techniques, portfolio management, financial decision-making, and risk assessment tools essential for today's finance professional.
- Industry Insight: Explore case studies on recent events like crypto mania, financial bubbles, corporate raids, and tax strategies, equipping you with critical insights relevant to current market dynamics.

Whether you're a future entrepreneur, a budding investment analyst, or simply passionate about staying ahead of financial trends, this course provides you with the essential tools and up-to-date knowledge to thrive in today's financial ecosystem.

### Literature

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

### Instructional Format

PBL, lectures, and tutorial meetings

## Assessment

Midterm exam, final case, and participation

## VSS2206 Supply Chain Management

*2000 Social Science Course*

5 ECTS, Spring Semester, Period 4

### Course Coordinator

Tom Schiefer, Department of Marketing & Supply Chain Management, SBE, Maastricht University
*Contact:* t.schiefer@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.

## 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

### 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 and ecosystems.
- 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 scholarly articles that can be used in this course. All readings can be obtained free of charge through the UM library.

### 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, there is a group project on a business opportunity in some country/region resulting into a group presentation. A(n individual) business consulting project is connected to this group project.

**Assessment**

Take home exam plus consulting essay plus group presentation plus participation/cases.

**This module may be a prerequisite/recommended for:**

Social and Environmental Entrepreneurship

## VSS3101 Performance Psychology in Sports and Business

*3000 Social Science Course*

5 ECTS, Fall Semester, Period 2

### Course Coordinator

Connie Drosinou, University College Venlo, FSE, Maastricht University
*Contact:* connie.drosinou@maastrichtuniversity.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 grasp key performance psychology principles for sports, business, and high-pressure domains.
- You can apply confidence, motivation and goal-setting theories like self-determination and SMART goals in real-life sports or business scenarios.
- You can assess techniques for enhancing performance, including confidence-building and emotion regulation.
- You can analyze and strategize against psychological barriers like stress and anxiety that hinder optimal performance.
- You can, together with a fellow student, constructively use an AI-tool to analyse a performance psychology question/scenario and critically analyse the output.
- You can synthesize course information and apply performance psychology concepts to real-life examples, discussing them in an engaging manner.
- You can reflect critically on your performance, identifying barriers and formulating a personal improvement plan.

### Description of the course

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

In this course, students will deepen their understanding of how individuals build mental toughness and overcome obstacles that hinder optimal performance. They will explore key psychological processes and skills that support people in unlocking their full 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 many of the examples in the course manual are drawn from the fields of sports and business to illustrate core concepts and spark discussion, there is ample room to apply these insights to other high-performance domains, such as healthcare and rehabilitation, emergency services (e.g., paramedics, firefighters), and education.

### Literature

A selection of articles will be provided, but you are also expected to search for and select additional articles on your own.

### Instructional Format

Tutorial meetings, recorded and on-campus lectures

## Assessment

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

- Think-Pair-Share activity resulting in a critical presentation using AI (individual/group assignment)
- Writing a mid-week Performance Psychology blog, including one person reflection post (individual assignment)

## 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 5

### Course Coordinator

Matthias Wibral, General Economics, SBE, Maastricht University
*Contact:* m.wibral@maastrichtuniversity.nl

### Pre-requisites

- ✓ none

### Recommendations

None

### 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.

## 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: Human Impact on the Earth System
- ✓ 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, 1pprox. €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)

## VSS3502 EU Environmental Law and Policy

*3000 Social Science Course*

5 ECTS Fall Semester, Period 1

**Course is offered every two years. Note that course is not offered in 2025-2026**

### Course Coordinator

TBA

*Contact:* campusvenlo-osa@maastrichtuniversity.nl

### Pre-requisites

None

### Recommendations

VSS1503 Foundations of EU Law and Policy

### Objectives

- To learn the basic features of EU environmental law
- To learn about key fields of EU environmental policy and their legal dimension
- To gain practical insights about the everyday impact of EU legal and policy decisions in relation to the environment.

### Description of the course

This course addresses the role that the EU plays in environmental protection. The first sessions will tackle the EU competences in environmental policy and law-making, its aims, principles and strategies. After the study of the basic elements of EU environmental law, the course will address relevant themes, such as water, nature, pesticides, emissions, and environmental quality objectives; with a special emphasis on how these environmental regulatory conditions affect food production. The course will also reflect on the application and enforcement of EU environmental legislation.

### Literature

Combination of academic articles and policy documents

### Instruction format

Lectures and tutorial meetings

### Assessment

Class presentation 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

### Course Coordinator

TBA

*Contact:* campusvenlo-osa@maastrichtuniversity.nl

### 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: Quantitative Research

*1000 Core Skills Training*

2.5 ECTS, Fall Semester, Period 2

### Course Coordinators

Connie Drosinou, University College Venlo, FSE, Maastricht University
*Contact:* connie.drosinou@maastrichtuniversity.nl

### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

Intended Learning Outcomes:

- To understand and differentiate the different stages of the empirical cycle.
- To formulate clear and concise research questions based on the PICOT principle, relevant to a selected or given epidemiological research problem.
- To conduct and evaluate a literature search for your topic.
- To construct a theoretical framework to support and guide your research investigation.
- To select and justify the appropriate epidemiological study design based on your research question and objectives.
- To identify and justify appropriate study populations for your research question.
- To select and justify appropriate measurement techniques for your study.
- To assess the validity and reliability of research methods in your study.
- To provide constructive feedback on academic publications, both orally and in writing.
- To write part of a concept publication for your topic (introduction, hypotheses, methods, mock tables, and discussion on the strengths and limitations of your methods).

### 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 an epidemiological topic of their own choosing.

### Literature

- Kumar R. Research Methodology – a step-by-step guide for beginners. ISBN9781446269978
- Additional literature will be provided during the course

### Instructional Format

Recorded lectures, weekly Q&A sessions, practical trainings.

### Assessment

Weekly homework assignments (40%) and final concept publication in which students apply what they have learned during the course (60%).

### 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 conducted 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)

## VSK2002 Lab Skills: Protocol Design

*2000 Skills Training*

2.5 ECTS, Spring Semester, Period 4

### Course Coordinator

Wim Vriezen, Brightlands Future of Farming Institute, Maastricht University
*Contact*: wim.vriezen@maastrichtuniversity.nl
Xinping Yang, Brightlands Future of Farming Institute, Maastricht University
*Contact*: xinping.yang@maastrichtuniversity.nl

### Pre-requisites

- ✓ None

### Recommendations

- VSC1401 Introduction to Chemistry
- VSK2015 Lab Skills: Good Laboratory Practice

### Objectives

At the end of this course students are able to:

- Analyse a problem, formulate research questions, and generate a hypothesis for a lab experiment.
- Design an experiment to test the hypothesis, select appropriate control groups, write a protocol, and plan the activities to be executed in the lab.
- Incorporate safety protocols, biohazard handling, and ethical considerations in laboratory research.
- Conduct laboratory experiments with precision, accuracy and professionalism demonstrated through use and execution of advanced laboratory techniques.
- 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

This is a skills training that aims to generate scientific curiosity in the student. It focuses on the development of experimental protocols in laboratory settings with the aim to equip students with the necessary skills and knowledge to design, implement, and analyze experiments in various disciplines within the sciences.
This skills training creates an environment that gives the opportunity to formulate your 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

Protocol design assignments, lab journal control, and practical report

## VSK2003 Lab Skills: Biomolecular Techniques

*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

- ✓ VSK2015 Lab Skills Good Laboratory Practice or equivalent **OR**
- ✓ VSK2002 Lab Skills Protocol Design

### Recommendations

Interest in biology and laboratory experiments

### Objectives

At the end of this course students are able to:

- Perform calculations required in bio-molecular biology.
- Preform proper laboratory skills (use of micro-pipets; balance; photo spectrometer).
- Explain, understand and preform a basic bio-molecular experiment.
- Explain and understand the theoretical background behind DNA-Isolation, Restriction analysis, photo spectrometry and DNA gel electrophoresis.
- Obtain useful data from basic photo spectrometry in various experiments.
- Apply and understand DNA gel electrophoresis and restriction analysis.
- Understand and perform thin layer chromatography (TLC).
- Properly follow the experiments using a laboratory journal.
- Report and reflect on the data obtained from a laboratory experiment.

### Description of the course

This skills training focuses on developing students' skills in bio molecular laboratory techniques and associated calculations. Through a combination of theory, hands-on experiments, and data analysis, the course aims to prepare students for conducting research in molecular biology.
By completing this course, students gained the theoretical knowledge and basic bio molecular laboratory skills necessary to conduct molecular biology experiments.

### Literature

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

### Instructional format

Laboratorial meetings.

### Assessment

- Preparations / labjournal (fail, pass, good)
- 1 short practical report (fail, pass, good)
- Basic laboratorial calculations (40%) and open-ended questions (60%)

## 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%

## VSK2006 Clinical Lab Skills

*2000 Skills Training*

2.5 ECTS, Spring Semester, Period 5

### 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
*Contact:* hjaap@xs4all.nl

### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

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

- risk assessment
- risk psychology
- 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 then 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 then 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

Christopher O'Bryan, System Earth Science, FSE, Maastricht University
*Contact:* c.obryan@maastrichtuniversity.nl

### 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 and via Keylinks Learning Resources.
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

Karin Lenssen, de, University College Venlo, FSE, Maastricht University
*Contact:* karin.lenssen@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 their core qualities and reflected upon how these influence their communication as a leader;
- can execute effective verbal and non-verbal active listening skills and reflect on how their ability to listen affects 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

- 80% of grade: weekly assignments in portfolio
- 20% 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

Two reflection papers regarding simulations
Oral exam: final negotiation simulation performance

## VSK2012 Integrated Sustainability Assessment of Climate Change

*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

VSC2501 Climate Change

### Objectives

- Understand climate and climate impacts models;
- Understand how these models are used to estimate future changes;
- Be able to design your own (conceptual)climate impact model;
- Understand the concept of Integrated Sustainability Assessment (ISA);
- Understand how various ISA tools and methods are used;
- Get hands-on experience in using several ISA tools (e.g. models, scenarios, games).

### Description of the course

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

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. Multiple diverse approaches are needed, varying from analytical methods (such as Integrated Assessment Models) to participatory methods (such as focus groups). Global warming is perceived as one of the biggest global health risks of the twenty-first century which could have a range of effects. In this skills course, we will use climate change as an example to demonstrate various ISA methods and tools.

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

### Literature

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

### Instructional Format

Presentations, computer-based group practicals, interactive sessions, research-based learning.

### Assessment

Graded IA exercises.

## VSK2013 Nutritional Assessment

*2000 Skills Training*

2.5 ECTS, Fall Semester, Period 1

### Course Coordinator

Kahlile Youssef Abboud, University College Venlo, FSE, Maastricht University
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### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

- To introduce students to the basic principles and techniques of measurement of dietary intake of various nutrients
- To learn how to assess energy balance in human subjects
- To understand the value of anthropometric measurements and clinical assessment in health risk assessment
- To introduce students to holistic assessment of the nutritional status and principles of dietary advising

### Description of the course

In this skill training, you will learn how to measure intake of nutrients, how to evaluate nutritional status and assess energy expenditures in human subjects. During the practical sessions you will be introduced to the principles of assessment of the dietary intake of macro- and micronutrients by means of food diaries and dietary recall method, learn how to evaluate body composition and how to estimate the level of physical activity. Moreover, principles of dietary advising as well as the possibilities of nutritional coaching offered by the modern mobile applications will be discussed. This skills training is relevant for students interested in nutrition, dietetics and lifestyle coaching.

### Literature

There is no mandatory literature for this course. Guidance will be provided per each task and the textbooks that can be found to be useful include:

- Raymond, J. L., & Morrow, K. (2023). Krause and Mahan's food and the nutrition care process (16th edition).
- Lee, R. D.; Nieman, D. C. Nutritional Assessment, 6th ed.; McGraw-Hill: New York, NY, 2013.
- Willett, W. (2013). Nutritional epidemiology (Third edition). Oxford University Press.
- Nieman, D. C. (2019). Nutritional Assessment (Seventh Edition). New York, NY. McGraw-Hill Education.

### Instructional Format

Lecture, discussions, tutoring and practicals.

### Assessment

Assignments and a final presentation.

## VSK2014 Interviewing I

*2000 Skills Training*

2.5 ECTS, Fall Semester, Period 2

### Course Coordinator

Karin Lenssen, University College Venlo, FSE, Maastricht University
*Contact:* karin.lenssen@maastrichtuniversity.nl

### Pre-requisites

- ✓ None

This course is only to be taken together with VPR2005 Interviewing II

### Recommendations

None

### Objectives

- Recognise when to use which conversation technique;
- Connect and apply conversation techniques to various purposes;
- Recognise and explain different interviewing formats for different purposes;
- Develop experience- and theory-based conversation strategies;
- Prepare qualitative research based on a given case.

### 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 how can you use all the information that is already out there? This skills training 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 prepare and conduct different interviewing techniques. This skills training aims to inspire you to make optimal use of interviews in future work.

### Literature

Materials available on Canvas

### Instructional format

Workshops

### Assessment

Research plan (research question and interview script) (25%), conducted scientific interviews (25%), conversation strategy plan (50%)

# VSK2015 Lab Skills: Good Laboratory Practice

*2000 (Life) Science Skills Training*

2.5 ECTS, Fall Semester, Period 1

## Course Coordinator

Koen J.P. Verhees, PhD, University College Venlo, FSE, Maastricht University
*Contact:* koen.verhees@maastrichtuniversity.nl

## Pre-requisites

- ✓ None

## Recommendations

None

## Objectives

At the end of this course students are able to:

- Understand the origins and importance of Good Laboratory Practice, as well as its key elements and requirements.
- Use laboratory equipment and materials to conduct basic laboratory experiments with care, precision, and efficiency.
- Document activities performed in the lab, such as followed procedures, planning, and raw data records.
- Assess the experimental results and formulate coherent discussions and conclusions.
- 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

This skills training is designed to provide students with an overview of Good Laboratory Practice (GLP), a set of principles and guidelines that ensure the quality, integrity, and reliability of non-clinical laboratory studies. You will learn to adhere to standardized protocols and best practices to minimize bias, error, or fraud in laboratory research and testing by making proper and efficient handling of apparatuses, instruments, and materials in the laboratory.
By successfully completing this course, you will be well-equipped to work in a laboratory research setting. This skillset will ensure the credibility and reliability of scientific research results while promoting transparency and accountability.

## 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 and practical reports

## VSK2016 Advanced Logic

*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

It is highly recommended that students have taken VCO1005 Information Literacy prior to this course.

### Objectives

- Understand and apply symbolic notations for arguments and statements;
- Understand the logical operations for conjunction, negation, and disjunction;
- Learn how to construct and interpret truth tables

### Description of the course

This course aims to develop students' understanding of logic and argumentation by building on elements of argumentation introduced in the core course 'Information Literacy'. The goal for the course is to familiarize students with a more formal approach to logic, and use this language of logic to both decode existing arguments as well as build new arguments.

### 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 where students will analyze one of their own previous papers;
A final assignment where students will construct an argument

## VSK3004 Science Communication I

*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

After this course, student will be able to:

- prepare and structure a clear, concise, and persuasive academic message.
- convey complex information clearly through visual and oral presentation skills.
- explore different science communication types to engage the audience and make their message stick.
- translate academic knowledge to a format that is understandable for laymen.
- understand and create their own digital professional footprint and IT use, so it can be used in an intentional manner.
- design a consistent personal communication strategy for both professional and popular purposes.

### Description of the course

Every scientist will have to deal with it more than once in their career: communicating science. As a scientist, you will need to go to a conference, write press releases about big projects and participate in societal science events. All these different communication types require different approaches. An understanding of the differences and practice in the different approaches is crucial in order for a scientist to have an impact.
In this course, you will practice different science communication techniques. You will build your own science communication portfolio so you can make your personal science communication strategy. We will address formal academic conference presentations, as well as writing popular sciences blogs. You will learn how to use your brain, your heart and your gut for communication science!

### Literature

A literature list will be provided on Canvas. Additional material needs to be retrieved by students themselves.

### Instructional format

Lectures and workshops

### Assessment

Academic presentation (35%)
Blog (35%)
Strategy for science communication (30%)

## VSK3005 Food Product Development

*3000 (Life) Science Skills Training*

2.5 ECTS, Spring Semester, Period 5

### Course Coordinator

Alvaro Garcia Fuentes, University College Venlo, FSE, Maastricht University
*Contact:* a.garciafuentes@maastrichtuniversity.nl

### Pre-requisites

- ✓ None

### Recommendations

VSC3203 Food Innovation
VSC2208 Sensory Science
VSC2203 Food Technology and Processing
VSC3202 Consumer Behaviour

### Objectives

At the end of this course students are able to:

- Identify key factors influencing the development, production, and commercialization of food products.
- Identify and analyze consumer preferences, as well as stay up-to-date with industry trends.
- Design food formulations using appropriate ingredient selection, processing techniques, and preservation methods.
- Optimize new product designs and/or improve existing offerings by implementing diverse product development techniques.

### Description of the course

In this skills training course you will develop and exercise abilities to create new, innovative food products through a comprehensive understanding of ingredient selection, formulation design, processing technologies, and sensory evaluation. During this intensive course you learn to develop a food product from the raw ingredients to the final packaging.
You will develop a strong foundation in the skills and knowledge required to create innovative, consumer-driven food products that meet market demands and regulatory requirements.

### Literature

Literature list will be published on Canvas.

### Instructional format

Lectures, workshops and tutorial group meetings.

### Assessment

Weekly assignments to culminate in a final food product presentation.

## VSK3101 PEERS – Undergraduate Research I

*3000 Skills Training*

2.5 ECTS, Spring Semester, Period 4

### Course Coordinator

Alvaro Garcia Fuentes, University College Venlo, FSE, Maastricht University
*Contact:* a.garciafuentes@maastrichtuniversity.nl

### Pre-requisites

GPA ≥7.0

**See VPR3103 PEERS**

## VSK3102 PEERS – Undergraduate Research II

*3000 Skills Training*

2.5 ECTS, Spring Semester, Period 5

### Course Coordinator

Alvaro Garcia Fuentes, University College Venlo, FSE, Maastricht University
*Contact:* a.garciafuentes@maastrichtuniversity.nl

### Pre-requisites

VSK3101 PEERS - Undergraduate Research I

**See VPR3103 PEERS**

# 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).

## VPR1005 Research Methods II: Qualitative Research

*1000 Core Project*

5 ECTS, Fall Semester, Period 3

### Course Coordinator

Alie Boer, de, University College Venlo, FSE, Maastricht University
*Contact:* a.deboer@maastrichtuniversity.nl
Karin Lenssen, University College Venlo, FSE, Maastricht University
*Contact:* karin.lenssen@maastrichtuniversity.nl

### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

After following the course, students will be able to:

- Identify and describe key characteristics of qualitative research and explain when and why it is an appropriate methodology;
- Summarize the three primary data collection methods in qualitative research (observation, interviewing, and document analysis) and explain when each method is most suitable for gathering data;
- Acquire a basic understanding of data analysis in qualitative research, in particular reflexive thematic analysis, to identify recurring patterns, themes and interpretations within data;
- Evaluate the methodological strengths and limitations inherent to empirical qualitative studies, considering factors such as validity, reliability and bias;
- Reflect upon personal positionality and ethical considerations as a researcher, demonstrating an understanding of how one's background, beliefs, and biases may influence the research process and outcomes;
- Develop a research proposal for a qualitative study on a chosen topic related to sustainable and/or healthy living, including clear research aims and objectives, appropriate data collection methods, and a plan for data analysis, demonstrating a clear understanding of how to design a qualitative research project, the methodological considerations and potential research contributions.

### Description of the course

Why is it so difficult to live healthier or more sustainable? How do citizens, businesses and policymakers view food waste and potential solutions to this phenomenon? How do people experience being part of a particular community?

People's experiences, the context in which events take place or themes about which little is known can best be investigated using qualitative research methods. Qualitative research allows you to study how specific situations or phenomena are experienced, why people look at a theme in a certain way and explore new areas and themes. Similar to quantitative research, this type of research requires a specific methodological approach. In this project, you will engage with qualitative research methods, design your own qualitative study, and learn to reflect on your role as researcher in the process.

## Literature

Denzin, N. K., & Lincoln, Y. S. (2024). The SAGE handbook of qualitative research (6th ed.). SAGE Publications Ltd.;
Braun, V., & Clarke, V. (2021). Thematic analysis – A practical guide. SAGE Publications Ltd.;
Research articles (via Canvas)
Pope, Catherine & Mays, Nicholas. (2020). *Qualitative research in health care* (Fourth edition). Hoboken: John Wiley and Sons, Inc.

## Instructional Format

Lectures, workshops, tutorial meetings and co-working sessions

## Assessment

Research proposal, presentation research proposal, reflection journal

## This module may be a prerequisite/recommended for:

PEERS

## VPR2001 Writing a Research Proposal

*2000 Project*

5 ECTS, Fall Semester, Period 3

### Course Coordinator

Adam Simpson, Language Centre, UB, Maastricht University
*Contact:* a.simpson@maastrichtuniversity.nl

### Pre-requisites

- ✓ VSK2004 Academic writing

### Recommendations

VCO1005 Information Literacy
VSK2016 Advanced Logic

### 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

Mitchell Kiefer, University College Venlo, FSE, Maastricht University
*Contact:* mitchell.kiefer@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. Mahdi Ebrahim, Department of Marketing & Supply Chain Management, SBE, Maastricht University
*Contact:* m.ebrahim@maastrichtuniversity.nl

### Pre-requisites

- ✓ None

### Recommendations

None

### Objectives

During the course, you will learn:

- How to devise companies' goals and the accompanying strategy to achieve those goals, taking into account the market situation (e.g., customers, competitors, market forces)
- How to divide a market into segments, and selecting relevant segments for targeting
- How to position a firm's offering, a product or service, taking into account customer needs and behavior
- How to build long-term relationships with customers
- How to develop an offering, using the marketing mix instruments available
- How to incorporate information from market research into the decisions surrounding the above issues
- To communicate your ideas efficiently and effectively
- To work in international teams

### 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, or 2nd edition from 2021). 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 II

*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

- ✓ VSK2015 Interviewing I

### 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

- Novice level application of basic and more advanced interview techniques in order to retrieve the required information;
- Organise and interpret the data gathered through interviews;
- Report and discuss the results of qualitative research in an academic way whilst critically evaluating its limitations;
- Apply an experience- and theory-based conversation strategy into real life;
- Reflect on the use of different conversations techniques in different settings.

### Description of the course

Preparing and conducting interviews provide you with an incredible amount of valuable information. The next step is to use your gathered information for the next steps. This project builds upon the skills training VSK2014 Interviewing I, and you will continue to work on your started project. You will execute your strategy for motivational interviewing, and start analysing and reporting on the scientific interviews you already conducted in the skills training. You will put your learnings into practice by keeping a critical eye on the techniques, the gathered information and yourself as researcher. All to inspire you to make optimal use of interviews in future work.

### Literature

Materials available on Canvas.

### Instructional Format

Workshops

### Assessment

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

## VPR3002 Think Tank

*3000 Project*

5 ECTS, Spring Semester, Period 6

### Course Coordinator

Mitchell Kiefer, University College Venlo, FSE, Maastricht University
*Contact:* mitchell.kiefer@maastrichtuniversity.nl

### Pre-requisites

One of the following modules: VSK2016 Advanced Logic; 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 II

*3000 Project*

5 ECTS, Spring Semester, Period 6

### Course Coordinator

Madhura Rao, System Earth Science, FSE, Maastricht University
*Contact:* m.rao@maastrichtuniversity.nl

### Pre-requisites

- ✓ VSK3004 Science Communication I

### Recommendations

None

### Objectives

After this course, students will be able to:

- Apply theoretical knowledge to the practical application of science communication.
- Differentiate between different science communication outlets and to select the most appropriate outlet for their intended audience and message.
- Create a science communication activity for a laymen's public.
- Use the necessary organizational and communication skills for reaching the experts and the public.
- Critically assess the success of their science communication activities and identify areas for improvement.

### Description of the course

This course focuses on developing students' ability to effectively communicate scientific concepts and research findings to diverse audiences. By integrating theoretical knowledge with practical application, the course aims to equip students with the skills necessary to engage both experts and laypeople in scientific discussions.
Students will develop the skills and knowledge crucial for developing public understanding of science and promoting evidence-based decision-making in society.

### Literature

A literature list will be provided on Canvas. Additional materials need to be retrieved by students themselves.

### Instructional Format

Lectures and workshops

### Assessment

Science communication activity (60%)
Science-based strategy for science communication activity including marketing, evaluation, and reflection (40%)

## 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 III

*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

Alvaro Garcia Fuentes, University College Venlo, FSE, Maastricht University
*Contact:* a.garciafuentes@maastrichtuniversity.nl

### Pre-requisites

- ✓ GPA ≥ 7.0
- ✓ VSK3101 PEERS - Undergraduate Research I
- ✓ VSK3102 PEERS - Undergraduate Research II

### Recommendations

Students joining PEERS should be genuinely interested in understanding how and why things work. The course is driven by exploration, not predefined answers. A curious mindset is essential for identifying meaningful research questions and staying motivated through challenges. Being open to feedback, managing time effectively, and collaborating actively with peers are key to making the most of this research-driven course.

### Objectives

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

- Formulate a clear and focused research question based on literature and aligned with an existing research line.
- Design and implement a feasible research plan, including methodology, data collection, and analysis strategies.
- Critically evaluate challenges and adapt research approaches based on feedback and emerging insights.
- Interpret and communicate research findings effectively through written, visual, and oral formats.
- Collaborate constructively in a research group setting, contributing to and integrating peer and mentor feedback throughout the research process.

### Description of the course

PEERS (Program for Excellence in Experimental Research Skills) is an honors research course designed for high-achieving students (GPA ≥ 7.0) to develop and carry out independent research projects aligned with the expertise of senior researchers. Across three phases—Concept Development, Experimental Execution, and Results Presentation—students engage in a research environment with real-world academic practice. Through weekly research group-style meetings, peer feedback, and structured milestones, students gain hands-on experience in defining research questions, designing and conducting experiments, analyzing data, and presenting findings. The course promotes critical thinking, scientific communication, and collaborative problem-solving, preparing students for advanced research or academic careers. This is a semester-long 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.

### Literature

Project-specific literature will be used

### Instructional Format

Research-Based Leaning, 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, Fall Semester
20 ECTS, Spring 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 an idea, topic substantiation and a presentation. Their final grade is based on two assessments, a proposal and the final Capstone. Oral defense of the final Capstone can be expected.

# 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, provided they meet the prerequisites of those courses.
The UCM and MSP 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/MSP' on the Campus Venlo intranet request form page. The request will automatically be forwarded to the UCM/MSP 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 and MSP courses not listed in the appendix, 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/MSP courses (may) also have prerequisites. MSP courses listed at least have VSC1101 Introduction to Biology as a pre-requisite and may have additional ones. To ensure that you meet all 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/MSP courses. You may need to ask for a prerequisite waiver. Please note that this prerequisite waiver needs to be submitted to UCM/MSP 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
Zeta Eirtree, Wilfred van Dellen, ucm-academicadvising@maastrichtuniversity.nl

MSP Office of Academic Advising
Christopher Pawley, msp-academicadvising@maastrichtuniversity.nl

# Period 1

## Courses

| Course Code | Course Title | Owner | UCV allowed |
|---|---|---|---|
| BIO2004 | General Zoology | MSP | Yes, as Sciences module |
| HUM1007 | Introduction to Philosophy | UCM | Yes, as Humanities module |
| HUM2003 | The Making of Crucial Differences: 'Race', Sexuality, Gender, and Class in Historical Perspective | UCM | Yes, as Humanities module |
| HUM2046 | Science and Technology Studies 1: Living in a Technological Culture | UCM | Yes, as Humanities module |
| HUM2058 | History of Contemporary Spirituality | UCM | Yes, as Humanities module |
| HUM3036 | Narrative Media | 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, Epidemiology 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 |
| SSC2020 | The Economics of Information | UCM | Yes, as Social Sciences module |
| SSC2025 | Memory | UCM | Yes, as Sciences OR Social Sciences module |
| SSC2046 | Globalization and Inequality: Perspectives on Development | UCM | Yes, as Social Sciences module |
| SSC2063 | The Psychology of Individual Differences: Personality and Intelligence | UCM | Yes, as Social Sciences module |
| SSC2072 | Less is More? An Introduction to Degrowth | UCM | Yes, as Social Sciences module |
| SSC3006 | The Social Study of Environmental Problems: Between Nature, Society, and Politics | UCM | Yes, as Social Sciences module |
| SSC3030 | Law of the European Institutions | UCM | Yes, as Social Sciences module |

## Skills Training

| Course Code | Course Title | Owner |
|---|---|---|
| SKI2085 | Ethnography and Qualitative Interviewing I | UCM |
| SKI2088 | Lab Skills: Genetics & Oncology | UCM |

# Period 2

## Courses

| Course Code | Course Title | Owner | UCV allowed |
|---|---|---|---|
| BIO3007 | Tropical Biology | MSP | Yes, as Sciences module |
| HUM1013 | The Idea of Europe: the Intellectual History of Europe | UCM | Yes, as Humanities module |
| HUM2059 | Data Analysis and Visualization for the Humanities and Social Sciences | UCM | Yes, as Humanities OR Social Sciences module |
| HUM3040 | Crucial Differences in the 21st Century | UCM | Yes, as Humanities module |
| HUM3049 | Science and Technology Studies 2: Science, Power and Construction of Facts | UCM | Yes, as Humanities module |
| HUM3050 | Aging and Ageism: A Cultural Critique | UCM | Yes, as Humanities module |
| INT3007 | Systems Biology | MSP | Yes, as Sciences 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 |
| SSC1027 | Principles of Economics | UCM | Yes, as Social Sciences module |
| SSC2011 | European Integration: History and Theory | UCM | Yes, as Sciences OR Social Sciences module |
| SSC2048 | Intermediate Microeconomics | UCM | Yes, as Social Sciences module |

## Skills Training

| Course Code | Course Title | Owner |
|---|---|---|
| SKI2086 | Lab Skills: Biochemistry | UCM |
| SKI3052 | Ethnography and Qualitative Interviewing II | UCM |

# Period 3

## Projects

| Course Code | Course Title | Owner |
|---|---|---|
| PRO2011 | Project Deep Reading | UCM |
| PRO2013 | Project Design Thinking | UCM |
| PRO3009 | Ethnography and Qualitative Interviewing III | UCM |

# Period 4

## Courses

| Course Code | Course Title | Owner | UCV allowed |
|---|---|---|---|
| BIO2003 | General Botany | MSP | Yes, as Sciences module |
| BIO2005 | Evolutionary Biology | MSP | Yes, as Sciences module |
| HUM1003 | Introduction to Cultural Studies: Doing Cultural Studies | UCM | Yes, as Humanities module |
| HUM2018 | Cultural Diversity in a Globalizing World | UCM | Yes, as Humanities module |
| HUM3029 | Literature, Art and Psychology | 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 |
| SCI2017 | Fundamentals of Organic Chemistry | UCM | Yes, as Sciences module |
| SCI2031 | Immunology | UCM | Yes, as Sciences module |
| SCI2033 | Datamining | UCM | Yes, as Sciences module |
| SCI2037 | Cell Biology | 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 |
| SSC2007 | Intermediate Macroeconomics | UCM | Yes, as Social Sciences module |
| SSC2010 | Contending Perspectives in Economics: The Case of Inequality | UCM | Yes, as Social Sciences module |
| SSC2018 | Brand Management and how to Communicate about Brands | UCM | Yes, as Social Sciences module |
| SSC2062 | Foundations of Cognitive Psychology | UCM | Yes, as Sciences OR Social Sciences module |
| SSC3011 | Public Policy Evaluation | UCM | Yes, as Social Sciences module |
| SSC3054 | International Economic Law: Trade, Investments and Sustainability | UCM | Yes, as Social Sciences module |

## Skills Training

| Course Code | Course Title | Owner |
|---|---|---|
| SKI2077 | Lab Skills: Cell Biology | UCM |
| SKI3010 | Evidence Synthesis 1: Study Designs in Systematic Reviewing | UCM |

# Period 5

## Courses

| Course Code | Course Title | Owner | UCV allowed |
|---|---|---|---|
| BIO2002 | Ecology | MSP | Yes, as Sciences module |
| BIO3004 | Animal Behaviour | MSP | Yes, as Sciences module |
| HUM2030 | Media and Technology; Philosophical Perspectives | UCM | Yes, as Humanities module |
| SCI2019 | Linear Algebra | UCM | Yes, as Sciences module |
| SCI3046 | Cognitive Neuroscience | UCM | Yes, as Sciences OR Social Sciences module |
| SCI3049 | Applied Immunology and Oncology | UCM | Yes, as Sciences module |
| SCI3051 | Data Analytics | UCM | Yes, as Sciences OR Social Sciences module |
| SSC1027 | Principles of Economics | UCM | Yes, as Social Sciences module |
| SCI2045 | Ecology and Resource Management: Understanding our Natural World | UCM | Yes, as Sciences module |
| SCI3052 | Global Health: Impact of Flows of People, Goods, Knowledge and Technologies on Health and Disease | UCM | Yes, as Sciences OR Social Sciences module |
| SSC2002 | International Relations: Themes and Theories | UCM | Yes, as Social Sciences module |
| SSC2004 | Clinical Psychology | UCM | Yes, as Social Sciences module |
| SSC2008 | Organization Theory | UCM | Yes, as Social Sciences module |
| SSC2022 | Accounting and Accountability | UCM | Yes, as Social Sciences module |
| SSC2024 | International Law | 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 |
| SSC2070 | Social Studies of Finance: The Making (and Taking) of Value in the Financialization of Our Lives | 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 |
| SSC3034 | International Economic Relations: the Case of Europe | UCM | Yes, as Social Sciences module |
| SSC3040 | Identities | UCM | Yes, as Social Sciences module |
| SSC3056 | Innovation Systems, Policy and Sustainability Transitions | UCM | Yes, as Social Sciences module |

## Skills Training

| Course Code | Course Title | Owner |
|---|---|---|
| SKI2048 | Introduction to Discourse Analysis | UCM |
| SKI2079 | Human Anatomy & Histology | UCM |
| SKI3011 | Evidence Synthesis 2: Statistics Coding in Systematic Reviewing | UCM |

# Period 6

## Projects

| Course Code | Course Title | Owner |
|---|---|---|
| PRO3005 | Public Policy Evaluation & Analysis Project | UCM |
| PRO3017 | Evidence Synthesis 3: Write Your Own Systematic Review | UCM |