



Management, Policy Analysis & Entrepreneurship in Health & Life Sciences MSc  
VU University Amsterdam - Fac. der Aard- en Levenswetenschappen - M Management, Policy Analysis and Entr. -  
2015-2016

Solutions for complex societal problems are increasingly sought through the application of scientific principles. At the same time, developments in the sciences impact society, some of which may lead to societal questions and concerns. An example is the new genomics technologies for disease diagnosis. On the one hand, it may improve care and prevention, while on the other hand, it raises ethical concerns related to violation of privacy, stigma and discrimination. Addressing such complex problems is complicated in itself. It calls for the integration of knowledge from several scientific disciplines and cooperation between a wide variety of actors in society – ranging from government, industry and societal organizations to patients and consumers.

The aim of the Master programme Management, Policy Analysis and Entrepreneurship in Health and Life Sciences (MPA) is to provide students with an academic attitude and skills in the field of interdisciplinary research on the interface of beta science and society aiming to formulate strategies to solve complex societal problems in the health and life sciences. The program provides a broadening of the knowledge and skills from a bachelor scientific background in disciplines such as science, technology and society studies, policy science, and management studies. In the MPA program, the following core competencies are developed:

- Analysis of complex societal issues related to the health and life sciences
- Formulation and implementation of strategies to deal with complex societal problems by way of interdisciplinary research.
- Effective cooperation and communication with researchers from scientific disciplines other than health and life sciences and with societal actors.

The MPA program comprises four specializations with the following objectives:

- Health and Life Sciences-Based Policy*: This specialization equips the graduate with insight into theories and strategies to address societal issues through governmental policy at various levels. Special knowledge and understanding are obtained in the discipline of policy analysis. Various forms of 'governance' and interactive policy-making in particular are discussed. In addition, the student acquires skills in data collection methods: from various written and digital sources to interviews and focus group sessions. Ultimately, the student is independently able to facilitate group processes for interactive policy-making and to apply various analytical tools to structure the multidisciplinary data towards strategically designed recommendations.
- Health and Life Sciences-Based Management and Entrepreneurship*: This specialization equips the graduate with insight into the management process of translating scientific knowledge to societally relevant innovations in the health and life sciences. Relevant theories on management, leadership, finance and law are discussed. The graduate is able to develop and critically assess business plans and has acquired skills in relevant scientific data collection methods and analytical tools.
- International Public Health*: This graduate acquires a wide-ranging insight into current and future challenges in international public health, their main causes, and applied and potential interventions. S/he obtains special knowledge on relevant concepts from various disciplines (including epidemiology, policy science, anthropology, management studies, biomedical sciences and health sciences). S/he has the ability to conduct scientific research in the field of international public health, addressing challenges and critically assessing the results of research. S/he acquires knowledge of current theory and the key research questions in this field and insight into its scientific and social relevance.
- Communication in the Health and Life Sciences*: Communication about science issues takes place not only between peers but also between scientists and 'end users' like the general public. This makes it a complex and dynamic field of research and practice; e.g. patient participation in health research, the use and effects of media metaphors and hypes, and public understanding of emergent technologies. The graduate with this specialization has a theoretical understanding of the complex problems that arise during such communication processes and has developed the skills necessary to behave professionally at this interface in an attempt to enhance communication outcomes between actors in science and society.

The year schedule can be found at the [FALW-website](#).

Further information about the MSc programme [Management, Policy Analysis & Entrepreneurship](#).

A complete programme description can be found at the [FALW-website](#).

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## Compulsory modules - all specializations

Courses:

Name	Period	Credits	Code
<a href="#">Scientific Writing in English (AM_MPA)</a>	Period 4+5+6	3.0	AM_1160
<a href="#">Thesis MPA</a>	Ac. Year (September)	12.0	AM_1122

## Expired programme components MPA

Compared to academic year 2011-2012, no programme components cease to exist within the master programme.

Courses:

Name	Period	Credits	Code
<a href="#">Clinical development and clinical trials</a>	Ac. Year (September)	6.0	AM_470585
<a href="#">Qualitative and Quantitative Research Methods</a>		6.0	AM_470582
<a href="#">Scientific Writing in English</a>	Period 2, Period 5	3.0	AM_471023
<a href="#">thesis MPA</a>	Ac. Year (September)	9.0	AM_471126

## Specialisation Communication

Programme components:

- [at least 6 EC to be obtained](#)
- [Internship communication](#)
- [compulsory modules 1e year \(Com\)](#)
- [compulsory modules 2e year \(Com\)](#)

at least 6 EC to be obtained

Courses:

Name	Period	Credits	Code
<a href="#">Innovation Behavior and Economy</a>	Period 3	3.0	AM_1052
<a href="#">Management of Innovative Technologies in Community Based Health Care</a>	Period 2	6.0	AM_1181
<a href="#">Science in Dialogue</a>	Period 2	6.0	AM_1002
<a href="#">Science Journalism</a>	Period 2	6.0	AM_471014

Science Museology	Period 3	6.0	AM_470590
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## Internship communication

Courses:

Name	Period	Credits	Code
Reflective Practice Internship Science Communication	Ac. Year (September)	30.0	AM_1163
Research Internship Science Communication	Ac. Year (September)	30.0	AM_1162

## compulsory modules 1e year (Com)

Courses:

Name	Period	Credits	Code
Analysis of Governmental Policy	Period 1	6.0	AM_470571
Communication, Organization and Management	Period 2	6.0	AM_470572
Internship I MPA specialization Communication	Semester 2	27.0	AM_1126
Research methods for analyzing complex problems	Period 1	6.0	AM_1182

## compulsory modules 2e year (Com)

Courses:

Name	Period	Credits	Code
Ethics in Life Sciences	Period 3	3.0	AM_470707
Internship II MPA Specialization Communication	Ac. Year (September)	30.0	AM_471125
Managing Science and Technology in Society	Period 1	6.0	AM_470586
Science and Communication	Period 1	6.0	AM_470587
Thesis MPA specialization Communication in the Health and Life Sciences	Period 1+2+3+4	12.0	AM_1129

## Specialisation International Public Health

The specialisation International Public Health (IPH) has a special focus on public health from a global perspective. This orientation prepares students for a career at a university, ministry, non-governmental or international organisation.

Programme components:

- [overige \(keuze\)cursussen](#)
- [kies tenminste 2 van deze cursussen](#)
- [compulsory modules 1e year \(IPH\)](#)
- [compulsory modules 2e year \(IPH\)](#)

[overige \(keuze\)cursussen](#)

[kies tenminste 2 van deze cursussen](#)

Courses:

Name	Period	Credits	Code
<a href="#">Clinical Development and Clinical Trials</a>	Period 3	3.0	AM_1180
<a href="#">Containment Strategies of Infectious Diseases in Global Context</a>	Period 1	6.0	AM_470127
<a href="#">Disability and Development</a>	Period 2	6.0	AM_470588
<a href="#">Epidemiology</a>	Period 3	3.0	AM_1179
<a href="#">Health, Globalisation and Human Rights</a>	Period 2	6.0	AM_470818
<a href="#">Innovation Behavior and Economy</a>	Period 3	3.0	AM_1052
<a href="#">International Comparative Analyses of Health Care Systems</a>	Period 3	6.0	AM_470820

[compulsory modules 1e year \(IPH\)](#)

Courses:

Name	Period	Credits	Code
<a href="#">Analysis of Governmental Policy</a>	Period 1	6.0	AM_470571
<a href="#">Communication, Organization and Management</a>	Period 2	6.0	AM_470572

Internship I MPA Specialization International Public Health	Semester 2	27.0	AM_1119
Research methods for analyzing complex problems	Period 1	6.0	AM_1182

## compulsory modules 2e year (IPH)

Courses:

Name	Period	Credits	Code
Ethics in Life Sciences	Period 3	3.0	AM_470707
Internship II MPA Specialization International Public Health	Ac. Year (September)	30.0	AM_471121
Managing Science and Technology in Society	Period 1	6.0	AM_470586
Thesis MPA specialization International Public Health	Period 1+2+3+4	12.0	AM_1127

## Specialisation Health and Life Sciences Based Management and Entrepreneurship

The specialisation Health & Life science-based Management and Entrepreneurship prepares students for a career in a pharmaceutical company, e.g. as a Clinical Research Assistant and advisor, or to establish one's own business.

Programme components:

- choose at least 1 of these courses
- Compulsory first-year modules specialization Management and Entrepreneurship
- Compulsory second-year modules specialization Management and Entrepreneurship

choose at least 1 of these courses

Courses:

Name	Period	Credits	Code
Clinical Development and Clinical Trials	Period 3	3.0	AM_1180
Entrepreneurship in Health and Life Sc.	Period 2	6.0	AM_470575
Epidemiology	Period 3	3.0	AM_1179
Innovation Behavior and Economy	Period 3	3.0	AM_1052
Management of Corporate Social Responsibility (CSR)	Period 1	6.0	AM_470583

Management of Innovative Technologies in Community Based Health Care	Period 2	6.0	AM_1181
Science in Dialogue	Period 2	6.0	AM_1002

## Compulsory first-year modules specialization Management and Entrepreneurship

Courses:

Name	Period	Credits	Code
Analysis of Governmental Policy	Period 1	6.0	AM_470571
Business Management in Health and Life Sciences	Period 2	6.0	AM_470584
Clinical Development and Clinical Trials	Period 3	3.0	AM_1180
Communication, Organization and Management	Period 2	6.0	AM_470572
Internship I MPA Specialization Management and Entrepreneurship	Ac. Year (September)	27.0	AM_1120
Research methods for analyzing complex problems	Period 1	6.0	AM_1182
Science in Dialogue	Period 2	6.0	AM_1002

## Compulsory second-year modules specialization Management and Entrepreneurship

Courses:

Name	Period	Credits	Code
Ethics in Life Sciences	Period 3	3.0	AM_470707
Internship II MPA Specialization Management and Entrepreneurship	Ac. Year (September)	30.0	AM_471119
Managing Science and Technology in Society	Period 1	6.0	AM_470586
Thesis MPA specialization Management and Entrepreneurship	Ac. Year (September)	12.0	AM_1130

## Specialisation Health and Life Sciences Based Policy

This specialisation offers the opportunity to become an expert in the field of policy. Career opportunities are policy preparation at government and different public health organisations or as a scientific

researcher at the university.

Programme components:

- at least 6 EC to be obtained
- compulsory modules 1e year (Pol)
- compulsory modules 2e year (Pol)

at least 6 EC to be obtained

Courses:

Name	Period	Credits	Code
<a href="#">Innovation Behavior and Economy</a>	Period 3	3.0	AM_1052
<a href="#">International Comparative Analyses of Health Care Systems</a>	Period 3	6.0	AM_470820
<a href="#">Management of Innovative Technologies in Community Based Health Care</a>	Period 2	6.0	AM_1181
<a href="#">Science in Dialogue</a>	Period 2	6.0	AM_1002

compulsory modules 1e year (Pol)

Courses:

Name	Period	Credits	Code
<a href="#">Analysis of Governmental Policy</a>	Period 1	6.0	AM_470571
<a href="#">Communication, Organization and Management</a>	Period 2	6.0	AM_470572
<a href="#">Internship I MPA Specialization Policy</a>	Semester 2	27.0	AM_1121
<a href="#">Policy, Politics and Participation</a>	Period 2	6.0	AM_470589
<a href="#">Research methods for analyzing complex problems</a>	Period 1	6.0	AM_1182

compulsory modules 2e year (Pol)

Courses:

Name	Period	Credits	Code
<a href="#">Ethics in Life Sciences</a>	Period 3	3.0	AM_470707

Internship II MPA specialization Policy	Ac. Year (September)	30.0	AM_471123
Managing Science and Technology in Society	Period 1	6.0	AM_470586
Thesis MPA specialization Health and Life Science-Based Policy	Period 1+2+3+4	12.0	AM_1128

## Analysis of Governmental Policy

<b>Course code</b>	AM_470571 ()
<b>Period</b>	Period 1
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	M.J. Kishna
<b>Examinator</b>	prof. dr. J.T. de Cock Buning
<b>Teaching staff</b>	prof. dr. J.T. de Cock Buning
<b>Teaching method(s)</b>	Lecture, Study Group, Computer lab
<b>Level</b>	500

### Course objective

- To acquire critical knowledge regarding different policy models and theories
- To master the correct use of central concepts in political and policy discourses.
- To further deepen your analytic skills with respect to the critical assessment of a complex societal question or dilemma in the health and life science;
- To learn to integrate science- specific knowledge with the knowledge and skills of other disciplines of the social sciences
- To practice skills in data collection and analysis
- To learn to set up valid lines of argumentation;
- To learn to translate research findings into policy recommendations;
- To get experienced in writing a policy advisory report;
- To improve your communication skills;
- To improve your skills in working effectively in a project team, through team building, team analysis and feedback.

### Course content

Governmental policy affects millions of people and is thus object of intensive debate and target of strong societal forces, like political parties, media and interest groups. Being an advisor or policy maker requires a thorough understanding of the dynamics of policy making, as well as from the psychological side as from the more social structures and their influence on a deliberative democracy.

The course contains several lectures on theoretical concepts and models concerning policy analysis. Furthermore you will be challenged, under supervision, to apply and practice these concepts and models in the project assignment. From the very first day, you will be part of a project team of about ten students. You are confronted with a real policy problem from an external commissioning institution (e. g. a non-governmental organization, a Ministry, an advisory council). Within those 4 weeks you will collect data by literature review and interviews

and conduct an interdisciplinary analysis on the basis of which you provide an advice. Specific attention is paid to working in a project team and team building. At the end of the course, you prepare an advisory report. On the last day of the course you present the report to the representative of the external institution who commissioned the project. In that presentation your team will highlight the main results of your analysis and defend the recommendations you propose.

### Form of tuition

Analysis of Governmental Policy is a fulltime course of four weeks (6 ECTS). The most recent course schedule is to be found on Blackboard.

Tuition methods include lectures, training workshops, and self-study.

The different elements have the following study time:

- lectures: 15 hours
- project and self-study: remaining hours (within the project: 18x 1 hour coach meeting)
- examination: 2 hours

Please note that attendance to the project meetings is compulsory. Attendance to the lectures is highly recommended. In our experience, relying on self-study alone is insufficient to pass the exam

### Type of assessment

Written exam (25%) and individual evaluation based on personal performance in the project team (50%), and assessment of various group products (report and presentation (25%)). All parts have to be passed successfully.

### Course reading

Buse, Mays and Walt: "Making Health Policy" McGrawHill/Open University press. (at least 2nd edition 2012).

### Recommended background knowledge

The project integrates the learned lessons from the first compulsory MPA courses: Qualitative & Quantitative Methods.\

### Target group

Compulsory course within the Masterprogramme Management, Policy Analysis and entrepreneurship for the health and life sciences (MPA) and the Societal differentiation of Health, Life and Natural Sciences Masters programmes.

### Remarks

The case is policy analysis and advice, but the exercised methods and skills are equally applicable to strategic marketing advice or evaluation studies. The teams will be coached by workgroup leaders.

## Business Management in Health and Life Sciences

<b>Course code</b>	AM_470584 ()
<b>Period</b>	Period 2
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	prof. dr. H.J.H.M. Claassen
<b>Examinator</b>	prof. dr. H.J.H.M. Claassen

<b>Teaching staff</b>	prof. dr. H.J.H.M. Claassen
<b>Teaching method(s)</b>	Lecture, Computer lab
<b>Level</b>	500

### Course objective

- To acquire knowledge and understanding into theory of knowledge valorisation in health and life sciences
- To acquire knowledge and insight in how to organise, protect and finance a business in health and life sciences
- 3To acquire knowledge and understanding into the pharmaceutical industry's business model and business processes
- To acquire knowledge and understanding into the challenges that face the pharmaceutical industry
- To apply newly acquired knowledge and understanding in writing a business plan
- To apply newly acquired knowledge and understanding by solving case examples
- To reflect on and critically evaluate the role of the pharmaceutical industry in the healthcare system
- To learn to autonomously write a business plan

### Course content

As a result of external factors (for example ageing of the population), it is being stated that our healthcare system is under pressure. As a central stakeholder in this healthcare system, the pharmaceutical industry is facing significant challenges the coming years and more than ever, the pharmaceutical industry is challenged to survive. Business Management in the Health and Life Sciences focuses on gaining insight in the pharmaceutical industry, its business model, business processes, challenges, as well as strategies and actions to overcome these challenges.

During the course, prof.dr. Eric Claassen (<http://www.falw.vu.nl/en/research/athena-institute/staff/claassen.asp>) together with highly experienced guest lecturers from the field will teach theoretical and practical knowledge during lectures and seminars. Tangible subjects that will be discussed during the lectures and seminars include the pharmaceutical industry's business model and business processes, intellectual property, portfolio management, finance, risk capital, grants and subsidies, team building and people management, different legal entities, fiscal and legal aspects when starting a new company, SWOT analysis in the life sciences and clinical trials.

The newly acquired knowledge is tested via an assignment (during which students will write either a personal career business plan or a 'real' business plan) and a written exam, both counting for 50% of the final grade.

### Form of tuition

- Lectures: 35h
- Assignment: 4h
- Work on assignment (self study): 40h
- Self-study: remaining hours

### Type of assessment

Written exam: 50%  
Personal Business Plan: 50%  
Both have to be passed

### Course reading

- Osterwalder, A. & Pigneur, Y. (2009). Business model generation. Self-published.
- Kubr, Marchesi & Ilar (McKinsey & company). (1998). Starting up. Achieving success with professional business planning. McKinsey & Company, Inc. The Netherlands, Amstel 344, 1017 AS Amsterdam.

### Target group

Optional course for Master students Management, Policy Analysis and Entrepreneurship in Health and Life Sciences (MPA), Societal differentiation of the Health, Life & Natural Sciences.

### Remarks

Guest lecturers/organisations:

- Robert Al, TU Eindhoven
- Tamar Weenen, VU university
- Esther Pronker, VU university
- Patrick de Boer & Jochem Bosschenbroek, Ttopstart BV
- Bart van Weezenbeek
- Bart Bergstein, Forbion Capital partners
- Michael Mellink & Majorie Soeter, Odgersberndtson
- Marga Janse, innovatief LerenLeren BV
- NL Octrooicentrum
- Price Waterhouse Coopers
- AsjesBisseling Belastingadviseurs
- And others to be announced

## Clinical development and clinical trials

<b>Course code</b>	AM_470585 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	prof. dr. H.J.H.M. Claassen
<b>Examinator</b>	prof. dr. H.J.H.M. Claassen
<b>Teaching staff</b>	prof. dr. H.J.H.M. Claassen
<b>Teaching method(s)</b>	Lecture, Computer lab, Study Group
<b>Level</b>	500

### Course objective

To acquire knowledge and insight into the role and objectives of drug and clinical development process

To acquire knowledge and insight into the clinical pharmacology in drug development, drug interactions, pharmacodynamic and metabolic interactions

To acquire knowledge and insight into clinical study methodology

To acquire knowledge and skills into the regulatory principles

To acquire knowledge of ICH-GCP and quality

To acquire knowledge and insight into clinical trial coordination

To acquire knowledge and skills into the data management and

statistics.

To acquire insight into the ethical aspects

To acquire insight into actual use of clinical trials in R&D

strategies

To learn to design a clinical study

To acquire insight into the different epidemiologic study designs

To acquire knowledge and skills into how exposure and disease in a population can be measured and how the relationships between them can be assessed (using SPSS)

To acquire knowledge and skills into interpreting and presenting the results of an epidemiologic study

### **Course content**

The need for rigorous evaluation of components of health care is increasingly recognised worldwide. An important type of evaluation is the clinical trial. The most commonly performed clinical trials evaluate new drugs, medical devices, biologics, or other interventions on patients in strictly scientifically controlled settings, and are required for regulatory authority approval of new therapies. This course aims to provide students with a theoretical and practical understanding of the issues involved in the design, conduct, analysis and interpretation of clinical trials of health interventions. Furthermore classes are provided on which the actual use of clinical trials in day to day R&D strategies within industry and universities is addressed in detail. Classes include: 'Life Cycle of a Clinical Trial', 'Clinical Trial Methodology', 'ICH-GCP Principles', 'The Ethics Committee', 'Safety Considerations in Clinical Trials', 'Quality Control & Quality Assurance', 'Compliance, Misconduct & Fraud'.

An additional week of basic epidemiology will help you to complement the knowledge obtained so far in the course with an understanding of the principles of other types of study designs (cross-sectional, longitudinal, case-control). Issues concerning exposure and disease measurement and exposure-disease relationships will be discussed in detail, and examples will be provided. Together with your colleagues, you will learn how to apply this knowledge first by hand (during the lectures), then to an epidemiologic database (during the computer-based sessions) and how to interpret the results critically.

### **Form of tuition**

Lectures: 25h

(Computer) workgroup: 32h

Preparing the exam: 2h

### **Type of assessment**

Written exam: 100%

### **Course reading**

Will be announced on Blackboard 1 month before the start of the course

### **Target group**

Optional course for Master students Management, Policy Analysis and Entrepreneurship in Health and Life Sciences (MPA), Societal differentiation of the Health, Life & Natural Sciences.

### **Remarks**

Guest lecturers/organisations:

- Eric Klaver
- DOCS
- Others to be announced

## Clinical Development and Clinical Trials

<b>Course code</b>	AM_1180 ()
<b>Period</b>	Period 3
<b>Credits</b>	3.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	prof. dr. H.J.H.M. Claassen
<b>Examinator</b>	prof. dr. H.J.H.M. Claassen
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

### Course objective

- to gain knowledge and insight into the function of clinical trials
- to gain knowledge and insight into the design of clinical trials
- to gain knowledge and insight into the conduct of clinical trials, including the applying rules and regulations (including ICH-GCP)
- to gain knowledge and insight into and reflect on the roles, tasks and responsibilities of the stakeholders involved in clinical trials
- to reflect on the role of golden standard in our healthcare system
- to learn where and how to look up rules and regulations.

### Course content

In today's healthcare system, clinical trials have gained the status of golden standard to test the safety and efficacy of newly developed drugs. For new drugs to enter the market, clinical trials must be passed and as a consequence, clinical trial outcomes have major effects on our healthcare system. While our healthcare system currently is under pressure to remain affordable and available to all, at the same time, clinical trial regulations are increasingly tightened and the prominence of clinical trials in our healthcare system is being criticized. For that matter, it is of great importance to learn about and reflect on the role of clinical trials in today's healthcare system.

The Clinical Development & Clinical Trials course will elaborate on the function, design and conduct of clinical trials, as well as the relevant stakeholders involved. The course consists of a theoretical part and an important practical part (e.g. gaining knowledge on clinical trial regulations). Classes include for example: 'Life Cycle of a Clinical Trial', 'Clinical Trial Methodology', 'ICH-GCP Principles', 'The Ethics Committee', 'Safety Considerations in Clinical Trials', 'Quality Control & Quality Assurance', 'Compliance, Misconduct & Fraud'.

The gained knowledge and skills will be evaluated by means of a written exam at the end of the course.

### Form of tuition

Lectures: 35 h.

Self study: remaining hours

### Type of assessment

Written exam: 100%.

### Course reading

Will be announced on Blackboard 1 month before the start of the course.

### Target group

Optional course for Master students Management, Policy Analysis and Entrepreneurship in Health and Life Sciences (MPA), Societal differentiation of the Health, Life & Natural Sciences.

### Remarks

Guest lecturers/organisations:

- Eric Klaver
- DOCS
- Others to be announced.

## Communication, Organization and Management

<b>Course code</b>	AM_470572 ()
<b>Period</b>	Period 2
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	M.J. Kishna
<b>Examinator</b>	M.J. Kishna
<b>Teaching staff</b>	dr. H. Wels, prof. dr. F. Scheele, dr. M.B.M. Zweekhorst
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

### Course objective

- To get acquainted with theories on organisational behaviour
- To obtain a deeper understanding of communication from the perspective of sharing and influencing results
- To acquire knowledge on organisational structures and designs
- To get acquainted with important theories on organisational transitions and change management
- To acquire insight into different management practices in the health and life sciences sector
- To gain insight in leadership and interpersonal behaviour
- To obtain insight in methods for motivation and conflict management
- To improve communication skills
- To practise analytical and advisory skills

### Course content

Organisations in the health and life science sector are changing fast, a phenomenon driven by newly emerging technologies and increasing societal complexity. A growing number of students with a beta degree will hold professional and managerial functions in these organisations. During this course students will learn how to be effective performers within these environments, both individually and in teams. This requires an understanding of the macro aspects of organisational behaviour, including designing organisations, managerial skills and ways of strategic thinking. Several speakers conduct lectures on aspects as motivation, managing interpersonal behaviour, leadership, communication and developing and changing organisations. The speakers explain theories from literature and relate them to their practical experiences. In addition, the students interview managers in health organisations and

analyse these interviews using the newly acquired theoretical concepts. Also, practical cases of health care companies will be analysed and discussed, resulting in advisory reports for management. With the other students you discuss your experiences and a coach helps you relate the experiences to theory.

**Form of tuition**

Lectures: approximately 22 hours  
 Response lectures: 4 hours  
 Training workshops 12 hours  
 Self-study and writing project assignment: remaining hours.

**Type of assessment**

Written exam (60%;) and assessment of the interviews, case study analysis, and reports (40%). Grades of both parts must at least be 6 or higher.

**Course reading**

To be announced on Blackboard

**Target group**

Compulsory course within the Master programme Management, Policy Analysis and Entrepreneurship for the Health and Life Sciences (MPA) and the Societal differentiation of Health, Life and Natural Sciences Masters programmes

**Remarks**

Attendance to training, workshops, interviews and discussions is indispensable

**Containment Strategies of Infectious Diseases in Global Context**

<b>Course code</b>	AM_470127 ()
<b>Period</b>	Period 1
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	prof. dr. J.F. van den Bosch
<b>Examinator</b>	dr. D.R. Essink
<b>Teaching staff</b>	dr. D.R. Essink, prof. dr. P.R. Klatser, prof. dr. J.F. van den Bosch
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

**Course objective**

- The endpoint of this course is that the student
- Has acquired in-depth theoretical and practical knowledge in relation to health intervention strategies for infectious diseases.
  - Has acquired insights in various infectious diseases and characteristics in relation to containment strategies.
  - Has acquired insight into the role of international institutions, such as the WHO, governmental advisory bodies, relevant professionals, executing institutions, NGOs and communities in designing and carrying out health interventions.
  - Understands which barriers are important when implementing containment

strategies of infectious diseases, with a focus on vaccination programs.

- Has acquired insight in theoretical concepts and methods to interpret results, evaluations and the effectiveness of programs.
- Has learned and practiced interdisciplinary methods and techniques to plan health interventions at community level in an interactive way.

### **Course content**

This course covers developments in intervention strategies used to address health needs in a global context. Containment strategies of infectious diseases, in particular vaccination programmes, alert systems and intervention strategies, provide specific areas of attention. The containment strategies to be discussed include programmes for known infections (including vaccination strategies and in case of absence of a vaccine, diagnosis and treatment strategies) and emerging infections (including isolation, prevention and communication strategies).

The student learns how to analyze bottlenecks and opportunities of the various strategies, how to interpret the results and to evaluate the implementation of programmes.

In addition, the student will take part in a group assignment on how to design containment strategies at community level in an interactive way, for e.g. tuberculosis, polio, rabies, malaria, HIV/AIDS, Ebola, etc. A presentation and writing of an essay will be part of the group assignment.

### **Form of tuition**

Lectures, group assignment, presentation, essay, self-study.

Basic background knowledge will be provided by VU lecturers, whereas relevant guest lecturers will present practical field examples.

Group assignment attendance is compulsory.

Contact hours: lectures 34 hrs, group work 8 hrs.

Self-study approx. 80 hrs.

### **Type of assessment**

Individual exam (60%) and group assignment presentation and essay (40%).

Both parts must at least be sufficient (6 or higher)

### **Course reading**

R. Webber, 2009. Communicable Disease Epidemiology and Control. 3rd Edition. CAB International, UK and USA. ISBN 978-1-84593-504-7.

Slide sets of lectures as made available on BlackBoard

Lecturers may make further readings available on BlackBoard.

### **Entry requirements**

Basic knowledge about the pathogenesis of infectious diseases, microbiology and immunology

### **Recommended background knowledge**

Minor course AB\_1046 "Infectious Diseases and Vaccine Development"

### **Target group**

Compulsory course within the Master differentiation International Public Health; optional course for students in other differentiations of the Masters Health Sciences, Biomedical Sciences, and Management, Policy Analysis and Entrepreneurship in Health and Life Sciences. Students from other backgrounds, please contact our secretariat for further

### Registration procedure

Enrollment through BlackBoard.

### Remarks

VU lecturers:

Prof. dr. Han van den Bosch

Prof. dr. Paul Klatser

Dr. Dirk Essink

Dr Bernard Ganter

Guest lecturers:

Dr. Jim van Steenberghe (RIVM/LUMC)

Dr. Helma Ruijs (RIVM)

Dr Frank Cobelens (KNCV)

Dr. Constance Schultsz (AIGHD/AMC)

Prof. dr. Maarten Postma (RUG)

Dr. Kitty Maassen (RIVM)

Dr. Koert Ritmeijer (MSF)

Prof. dr. Robert Sauerwein (UMC Nijmegen)

Prof. dr. Cees Hamelink (VU)

Prof. dr. Guus Rimmelzwaan (EMC Rotterdam)

Dr. Hans Zaaijer (Sanguin)

Prof. dr. Christina Vandenbroucke (VUMC)

## Disability and Development

<b>Course code</b>	AM_470588 ()
<b>Period</b>	Period 2
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. R.M.H. Peters
<b>Examinator</b>	dr. R.M.H. Peters
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

### Course objective

- To develop an understanding of disability and the issues faced by people with disabilities
- To develop knowledge and skills for disability research, policy development and management related to disability, rehabilitation and development
- To acquire insight into the epidemiology of disability, with separate attention for important determinants like gender, poverty and HIV/AIDS
- To learn how to use relevant models of disability and the conceptual framework of the International Classification of Functioning, Disability and Health (ICF)
- To understand the importance of human rights in relation to disability and to learn to use the UN Convention for the Rights of Persons with Disabilities for advocacy and other rights-based interventions
- To acquire skills and knowledge in measurement and research

methods relevant to disability

- To understand the importance of inter-sectoral collaboration
- To gain insight in participatory approaches

### **Course content**

The Disability and Development (D&D) course focuses on a broad range of issues related to disability and rehabilitation in the context of development. This means that the focus is on people with disabilities in low and middle-income countries. Disability affects an estimated 1 billion people worldwide, the majority of whom live in low and middle-income countries. The large majority are poor and have no access to rehabilitation services; neither are facilities in place to allow them to be included in the mainstream of society.

To date, very few services and programmes are available to address these needs. The realisation that the Millennium Development Goals cannot be met without addressing the needs of people with disability has brought a new impetus to the field of disability and development. Another major recent development was the adoption of the UN Convention on the Rights of Persons with Disabilities in December 2006. It is expected that there will be a substantial increase in demand for training of a large variety of professionals (e.g. researchers, managers, architects, lawyers, health professionals) with formal training and qualifications in the field of disability-inclusive development.

This rapidly increasing interest in disability, as a development and human rights issue, means that this emerging field of study will rapidly gain in importance and should become part of any serious higher education programme in social and development studies and in international public health. The course will cover essential knowledge and skills in this subject.

The 4-week course programme will include the following subjects:

- Disability models and stereotypes,
- Frequencies and distribution of disability,
- Experience of having a disability,
- ICF conceptual framework,
- Disability rights, including the UN Convention on the Rights of Persons with Disabilities,
- Culture and disability,
- Determinants of disability, including stigma and discrimination, poverty, gender and HIV/AIDS,
- Disability-relevant research methods, including examples of disability research
- An introduction to community-based rehabilitation and disability inclusive development.

### **Form of tuition**

Problem-based learning supported by lectures and an article writing assignment.

- Lectures: 36 hours
- Tutorial groups: 18 hours
- Other events: 12 hours
- Self-study: remaining hours

### **Type of assessment**

Participation in tutorial groups: 10%

Take-home examination, submitted electronically: 60%

Scientific article/essay: 30%

For all parts a pass grade (> 5.5) needs to be obtained in order to receive a final mark.

### Course reading

See e-reader

### Entry requirements

Bachelor-level education; any subject

### Target group

The Disability & Development module is an optional course for Master students Management, Policy Analysis and Entrepreneurship in Health and Life Sciences (MPA), International Public Health and Biomedical Sciences; external students from low and middle-income countries are strongly encouraged to apply. We encourage the participation of students with disabilities, especially from low and middle-income countries.

### Remarks

For more information contact Ruth Peters ([r.m.h.peters@vu.nl](mailto:r.m.h.peters@vu.nl))

## Entrepreneurship in Health and Life Sc.

<b>Course code</b>	AM_470575 ()
<b>Period</b>	Period 2
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	prof. dr. E. Masurel
<b>Examinator</b>	prof. dr. E. Masurel
<b>Teaching staff</b>	prof. dr. E. Masurel
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

### Course objective

Students obtain knowledge about and insight in the relevance of entrepreneurship and innovation for their own discipline. Students learn about the processes which are involved in the recognition and exploitation of opportunities, about creating economic and social value and about the nature and role of networks. In addition students gain knowledge of different entrepreneurial processes and the importance of valorisation of (bio)medical findings and business ideas for a knowledge-based economy.

Learning objectives

- Become familiar with an innovation outlook on entrepreneurship.
- Become aware that value-adding opportunities not only contain financial aspects but also social and ecological aspects (sustainable entrepreneurship).
- Gain the ability to write a feasibility plan on how to bring an innovation to the market.
- Obtain knowledge about and insight in the relevance of entrepreneurship and innovation for science disciplines.

- Learn about the processes which are involved in the recognition and exploitation of opportunities, about creating economic and social value and about the nature and role of networks.
- Gain knowledge of different entrepreneurial processes and the importance of valorisation of (bio)medical findings and business ideas for a knowledge-based economy.

### **Course content**

This course consists of two tracks: a theoretical track and a practical track. These two tracks run simultaneously. In the first track you learn about entrepreneurship. Answers are found on questions such as: What is entrepreneurship? What defines an entrepreneur? What are entrepreneurial opportunities? What is the role of innovation in entrepreneurship? What is corporate social responsibility (CSR)? How can we judge the feasibility of entrepreneurial ambitions? Simultaneously you work on an assignment (second track). In the first week of this course you search for an innovation in your own discipline (product, service, process etc). Your choice must be approved by the lecturers. The first part of the assignment consists of a description of the innovation which you have chosen. Subsequently, you make a SWOT-analysis and a network analysis of the innovation. Also a paragraph on CSR aspect should be added. The final part of the assignment is your own feasibility study: how would you valorize the innovation to the market?

### **Form of tuition**

Lectures, personal meetings. Each week scientific lectures are given (on entrepreneurship, SWOT-analysis, innovation, CSR etc). These lectures are both the basis for the exam and for the assignment. Each week the student has a short meeting with his / her supervisor, in order to discuss the progress of his/her assignment.

### **Schedule and study time**

The total study time is 160 hours.

Tuition methods include lectures, consultancies and self-study.

The different elements have the following study time:

- lectures 18 hours
- consultancies 8 hours
- writing feasibility plan 65 hours
- examination 4 hours
- self study remaining hours

### **Type of assessment**

You conduct a written exam and an assignment. Both the exam and the assignment determine 50% of the grade. The exam and the assignment must be of sufficient quality.

### **Course reading**

To be announced on Blackboard

### **Target group**

Optional course for Master students Management, Policy Analysis and Entrepreneurship in Health and Life sciences (MPA), M-differentiation of the Health, Life & Natural Sciences, Biology, Biomedical Sciences.

### **Remarks**

Attendance is compulsory. Prior knowledge: Business Management in Health and Life sciences.

## **Epidemiology**

<b>Course code</b>	AM_1179 ()
<b>Period</b>	Period 3
<b>Credits</b>	3.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. R.M.H. Peters
<b>Examinator</b>	dr. R.M.H. Peters
<b>Teaching method(s)</b>	Lecture, Study Group, Computer lab
<b>Level</b>	500

### Course objective

- To gain an understanding of the principles of different study designs
- To gain an understanding of issues concerning measures of disease and association
- To gain an understanding of principles of bias and confounding
- To gain an understanding of the principles of screening and critically appraise its use in public health
- To learn how to calculate and interpret sensitivity, specificity, positive and negative predictive values
- To acquire skills to perform statistical analyses using a database (during the computer-based sessions) and interpret, describe and present the results critically

### Course content

This two week course will help you to obtain an understanding of the principles of study designs (cross-sectional, longitudinal, case-control, clinical trials). Issues concerning exposure and disease measurement and exposure-disease relationships will be discussed in detail, and examples will be provided. Together with your colleagues, you will learn how to apply this knowledge first by hand (during the lectures), then to an epidemiologic database (during the computer-based sessions) and how to interpret the results critically.

### Form of tuition

- Lectures (12 hours)
- Work groups (12 hours)
- Computer practicum (12 hours)
- Self-study (remaining time)

### Type of assessment

- Exam
- Assignment

Both elements need to be passed.

### Course reading

To be announced

### Target group

Students without a background in epidemiology

### Registration procedure

n/a

### Remarks

Maximum 25 students

## Ethics in Life Sciences

<b>Course code</b>	AM_470707 ()
<b>Period</b>	Period 3
<b>Credits</b>	3.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	prof. dr. J.T. de Cock Buning
<b>Examinator</b>	prof. dr. J.T. de Cock Buning
<b>Teaching staff</b>	prof. dr. J.T. de Cock Buning, dr. J.F.H. Kupper
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	400

### Course objective

To provide a toolbox of ethical instruments to analyze properly moral problems related (to one's own) research in the life sciences

- To acquire conceptual knowledge of the central concepts in applied philosophy and professional ethics
- To challenge an ethical reflection on one's own life science specialization and to open it for an impartial and constructive discussion
- To exercise a team based project to enter prepare and execute a moral dialogue
- To acquire the necessary skills to handle ethical issues in an accountable manner, as a professional academic beyond one's own inclinations and judgments

### Course content

Researchers in life sciences generate the knowledge that builds the future of our society. Therefore, professional academics should be accountable for their decisions, experimental designs and presentation of results. In this short course, the principles of justification will be illustrated with cases of technology ethics and medical ethics. The way an ethical review committee on animal research works, is simulated by a role play exercise on an actual research protocol. Finally, as a small group training project, an ethical dialogue is prepared and executed together with another team.

### Form of tuition

Ethics in the Life Sciences is a fulltime course of four weeks (3 ECTS).

The total study time is 80 hours.

The different elements have the following study time:

- Lectures: 13 hours
- Work groups: 17 hours
- Group assignment: 24 hours
- Exam: 2 hour
- Presentation : 4 hours
- Self working (reading in the first week ): 20 hours

Please note that attendance to the work group meetings is compulsory. Attendance to the lectures is highly recommended. In our experience, relying on self-study alone is insufficient to apply the theory of the lectures in the assignments of the workgroups, and to pass the exam.

**Type of assessment**

- Degree of intellectual participation in the workgroups (10%)
- exam (50%) has to be passed
- written and verbal execution of the ethical dialogue (40%)

**Course reading**

Available on Blackboard

**Entry requirements**

Bsc Biology, Biomedical Sciences, Psychology with profile Biological Psychology or Neuropsychology

**Target group**

Compulsory course in all FALW Master programmes, except Health Sciences and Neuro Sciences

**Remarks**

Lectures in English, part of the workgroups are in Dutch. All presentations and plenary discussions in English.

In order to maximize the experience of differences in values and preferences, and this increase meaningful ethical inquiry we will place you randomly in the workgroups. Placement will be communicated after the introduction lecture.

**Health, Globalisation and Human Rights**

<b>Course code</b>	AM_470818 ()
<b>Period</b>	Period 2
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	A. van Luijn MSc
<b>Examinator</b>	dr. C.W.M. Dedding
<b>Teaching staff</b>	prof. dr. P. Heutink
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

**Course objective**

The student;

- Is able to describe, understand and apply human rights concepts in a global context
- Develops a deeper understanding and A critical attitude towards scientific literature in the field of health, globalization and human rights in order to formulate soundly argued positions
- Is able to create his/her own vision with regard to the socio-cultural dimensions of human rights values in relation to public health
- Is able to apply methods of human rights assessment in relation to innovations in health care
- Demonstrates the ability to write and present according to academic standards

**Course content**

This course focuses on the human rights issues that are raised around the globe in connection with public health concerns. The course introduces the students to the effects of globalization on health issues, to the relevant UN human rights instruments on health and to the mechanisms to promote and protect these rights. Attention is given to a wide range of human rights topics in which health and well being play a crucial role. Examples are situations of armed conflict, reproductive rights, migration and refugee issues and childrens rights. Within the context of current globalisation processes the importance of local cultural insights into the human rights & public health interaction will be discussed. During the course students will prepare and participate in a simulation on a human rights assessment of innovations in health technology and discuss relevant scientific literature in study groups. In the exam students will show their creative problem-solving skills applying them to human rights dilemmas in public health.

### **Form of tuition**

Contact hours

Lectures: 33 hours

Work groups: 12 hours

Group project, simulation and exam: 11 hours

Self study and preparing: remaining hours

### **Type of assessment**

Group project (10%), Simulation (20%), exam (70%). All parts need to be passed (6.0)

### **Course reading**

To be announced at the start of the first work group/lecture

### **Target group**

Optional course for students in all differentiations of the Masters Health Sciences, Biomedical Sciences and Management, Policy Analysis and Entrepreneurship in Health and Life Sciences.

### **Remarks**

(Guest) Lectures and guest organisations (under reservation):

Cees Hamelink

Christine Dedding (Children and rights)

Fiona Budge (Culture and Health)

Bert Keizer (Elderly Rights)

Els Mons (Rights and disabled persons)

Women on Waves

Doctors without Borders

And more to be announced.

For more information contact Wanda Konijn ([w.s.konijn@vu.nl](mailto:w.s.konijn@vu.nl)) or Anna van Luijn ([a.van.luijn@vu.nl](mailto:a.van.luijn@vu.nl))

## **Innovation Behavior and Economy**

<b>Course code</b>	AM_1052 ()
<b>Period</b>	Period 3
<b>Credits</b>	3.0

<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	M.J. Kishna
<b>Examinator</b>	M.J. Kishna
<b>Teaching method(s)</b>	Lecture
<b>Level</b>	500

### Course objective

Innovation, Behavior and Economy (IBE) is a course that gives you the theory, tools and practical experience to view and analyse health care as a complex, adaptive system. You will understand better how such a system works and how the individuals and organisations in it react to changes and interventions.

You will learn and apply recent system theories to find out why the health care system works as it does, the effects of privatization, the major survival mechanisms, how individual behavior leads to emergent system effects and how hidden barriers may obstruct innovation.

You'll practice and integrate what you've learned in a field work exercise and by studying health care cases. And you'll experience, in the form of gaming/simulations, why you too make irrational decisions and why your individual decisions result in emergent effects at the system level.

### Learning objectives:

- \* Understand and analyse the general properties of complex systems.
- \* Get acquainted with innovation theories in the context of a system approach.
- \* Understand the interactions between individual behavior, economy and the (health care) system.
- \* Acquire knowledge on innovation and business models against the challenge to change the health care system.
- \* Gain insight in what determines the efficiency and effectiveness of health care systems.
- \* Improve communication skills in group exercises and presentations.
- \* Practice system analysis and modelling of health care issues in relation to innovation.

### Course content

IBE's lectures, exercises and simulations cover topics such as:

- \* The general properties and laws of complex (adaptive) systems and the mechanisms that determine survival, innovation and cooperation.
- \* The relation between 'irrational' behavior and emergent system effects: why students and other actors react in different and unexpected ways, against the assumptions of classical economy.
- \* Innovation as on-going, chaotic process that requires system models and involves 'technology' as a powerful driver. Network models of systems give insight in social structures and predict how diseases spread.
- \* Innovations need a 'changeable' environment: learn how to initiate and manage health care improvement projects "at the edge of chaos". If you consider to become a policy maker: understand how the system works, make better policies, save time and money and recognize 'perverse incentives'.
- \* Companies that understand how the system works use smart strategies for their innovations. New business models, using the experiences of

patients and smart innovation models can be effective to support and spread innovations. But: fixed strategies are dangerous, even if they're perfect...

\* Delivering affordable health to the global population is among the world's most pressing problems. Copying 'Western systems' in developing countries doesn't work. The World Health Organisation applies a complex system approach for its activities.

### Form of tuition

IBE is a full time course of two weeks (3 ECTS). Total study is 80 hours.

Form of tuition: lectures, self-study (text book, cases and literature), group exercises, gaming/simulation, gaming and presentations/discussions.

Lectures: 12 hours

Group exercises: 24 hours

Self-study cases: 8 hours

Gaming / simulation: 4 hours

Exam: 2 hours

Self study: remaining hours

### Type of assessment

\* Written exam (70%)

\* Field work group exercise (report; pass/fail)

\* Case study group exercise (report (20%) and presentation (10%)).

All three parts should be sufficient/passed.

### Course reading

To be announced on Blackboard at least 4 weeks prior to the course

### Target group

Optional course within the Master programme Management, Policy Analysis and Entrepreneurship for the Health and Life Sciences (MPA) and the Societal differentiation of Health, Life and Natural Sciences Masters programmes.

### Remarks

Course coordinator: dr. Th.P. Groen (FALW / Athena Institute;  
[t.p.groen@vu.nl](mailto:t.p.groen@vu.nl))

## International Comparative Analyses of Health Care Systems

<b>Course code</b>	AM_470820 ()
<b>Period</b>	Period 3
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. D.R. Essink
<b>Examinator</b>	dr. D.R. Essink
<b>Teaching staff</b>	prof. dr. J.E.W. Broerse, dr. D.R. Essink, dr. T.J. Schuitmaker-Warnaar
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

## Course objective

- To understand and recognize the different components of a health system and different models of health system organization using various frameworks for health system analysis
- To understand and analyze outcomes of health systems with respect to equity, fair financial contribution and health status
- To understand the complex adaptive nature of health systems and its constitution
- To understand different methods in analyzing and comparing health systems: health system performance assessment (benchmarking), case study analysis, cost effectiveness analysis
- To understand the underlying reasons for health system reform and to recognize different health care reform strategies;
- To understand cases study methodology regarding comparison of components of health systems
- To apply the acquired knowledge in the context of;
- To design, carry out and reflect on a (comparative) analysis of developing, transitional and developed countries, making use of the framework for comparative analysis;
- To be able to link the characteristics of policy recommendations, strategies on health system reform and public opinions on certain aspects of care to the specific determinants of the country/region at hand.
- To give a well structured and academically solid lecture on the comparison of countries;
- To write a clearly structured and academically solid paper on the comparative analysis you have carried out;

## Course content

Given the fact that health systems worldwide are confronted with demographical and epidemiological changes, health systems are currently experiencing a period in which they have to re-assess their set-up, framework and goals. In this course you will obtain an overview of the complex nature of health systems and its different components, both with respect to conceptual components (service delivery, resource creation, stewardship, financing) and content components (primary care, mental health care, etc), and you will acquire skills to analyze and compare these components. In various lectures, both the quantitative aspects, and the critique there-upon, and the qualitative aspects of health system comparison is discussed. Furthermore, you will gain insight in the complexity and culturally determined nature of health system design and health system reform, through a series of lectures from VU-lecturers and experts from a variety of institutions such as the Royal Tropical Institute and the Nivel. Through two assignments, you learn and reflect on the topics that are discussed throughout the course. First, you will critically review a comparative analysis report on a specific aspect of health care in Europe, and present this in a lecture. Second, you will set up your own comparative analysis between two selected countries on a specific health care theme. In this case, you are invited to look critically at your own analysis process. You will report on you findings by means of a report and via a poster presentation. In both assignments you will have regular feedback sessions with health researchers in small groups.

## Form of tuition

'International Comparative Analyses of Health Care Systems' is a fulltime course of four

weeks (6 ECTS). The total study time is 160 hours. Tuition methods include lectures, training workshops, and self-study.

The different elements have the following study time:

- lectures 22 hours
- assignment sessions 28 hours
- pass/fail test 2 hours
- (project) self study remaining hours

Attendance to the assignment sessions is compulsory

### **Type of assessment**

You are assessed on the basis of two comparative case study assignments. Both assignments need to be passed (higher than 5.5).

- Assignment 1: 40%
- Assignment 2: 60%

In addition a brief pass/fail test is given which needs a pass but is not graded, to check lecture attendance.

### **Course reading**

A selection of literature will be made on the basis of lectures and state of the art research. (selection of last years literature)

- Mills, A.J. and Ranson, M.K. (2006). The design of health systems. In Merson, M.H., Black, R.E. and Mills, A.J. (eds.). International public Health: diseases, programs, systems and policies. London: Jones and Bartlett.

Methods: Benchmarking

- WHO (2000). World Health report 2000: health systems: improving performance. Geneva: WHO.

- o Message from the director
- o Chapters 1 and 2
- o Statistical Annex

- M.M. Harbers, E.A. van der Wilk, P.G.N. Kramers, M.M.A.P. Kuunders, M. Verschuuren and Achterberg. (2010) Dare to compare: Benchmarking the Dutch health with the European community health indicators. RIVM

- o Chapters 1, 2, 3 and 10

- GP Westert, MJ, van den Berg, SLN Zwakhals, JD de Jong, H Verkleij (2010). The Dutch healthcare performance report. RIVM

- o Executive summary
- o Chapter 1
- o Chapter 6

Methods: case study

- Yin, R. K. (2009). Case Study Research: Design and Methods. Fourth edition, Sage publications, London

- o Chapters 1 and 2

Health systems

- George Shakarishvili, Rifat Atun, Peter Berman, William Hsiao, Craig Burgess, and Mary Ann Lansang (2010). Converging Health Systems Frameworks: Towards A Concepts-to-Actions Roadmap for Health Systems Strengthening in Low and Middle Income Countries. In Global Health Governance

- Hsiao (2003). What is a health system and why should we care

- Van Kemenade (2007). European Health Systems. Eslevier  
o Chapter 15

- Plsek and Greenlagh, (2001). The challenge of complexity in  
healthcare. British Medical Journal,10, 323:625

- Building the field of health systems and policy research

- o Framing the questions
- o An Agenda for Action
- o Social Science Matters

- Murray, C.J.L. and Frenk, J. (2008). Health metrics and  
evaluation: strengthening the science. Lancet, 371(9619), 11911199.

### Recommended background knowledge

It is recommended that students have knowledge on public policy in the  
context of healthcare.

### Target group

Compulsory course within the Master specialization International Public  
Health, optional course within the Master specialization Infectious  
Diseases (master programme Biomedical Sciences). In any other  
circumstances admission should be requested from the course coordinator.

### Remarks

Guest lecturers:

dr. Rob Baltussen, health economics at (UMCG)  
Dr. Michael van den Berg (RIVM)  
Barend Gerretsen (KIT)  
Prof. dr. Wienke Boerma (NIVEL)

## Internship I MPA specialization Communication

<b>Course code</b>	AM_1126 ()
<b>Period</b>	Semester 2
<b>Credits</b>	27.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. J.F.H. Kupper
<b>Examinator</b>	dr. J.F.H. Kupper
<b>Level</b>	500

### Course objective

The internship is a compulsory part of the Master's programme. The aims  
of the internship are:

- Learn to independently apply and expand your practical science  
communication skills in one particular area of the field (writing,  
multi-media, facilitation, policy and strategy development, content  
design, etc.).
- Critical self-assessment and reflection on acquired science  
communication competencies in the field.
- Conduct scientific research independently: assess scientific

information, design a research project, apply scientific methods, collect data, report and discuss findings.

- Present and discuss about internship and research outcomes.
- Learn to cooperate with researchers and practitioners of various disciplines.
- Gain an impression of a potential future field of career.

### Course content

When you are enrolled in the VU Science Communication specialization or the UvA Major Science Communication you need to conduct one internship (30 ECTS, 5 months). MPA students that choose the Science Communication specialization also need to do at least one internship (30 ECTS, 5 months) in the Science Communication field. The internship has two possible formats: the full Research Internship and the Reflective Practice Placement (RPP). The complete and up-to-date information about the internship can be found in the SC internship guide line on blackboard (science communication community).

### Form of tuition

Work placement, under supervision of VU-staff.

### Type of assessment

Within six weeks after the start of the internship a Go/No Go evaluation is made by the VU supervisor. The aim of this interim evaluation is to decide whether the project and the student both have enough potential to continue (Go) or not (No Go). This evaluation is based on:

- Written material by the student, including a final research proposal and either the Introduction or Methods section of the article or both.
- Attitude of the student and execution of the project during the initial stage.

The final assessment of the internship is undertaken by the VU-supervisor and the second assessor.

In the final assessment, the VU supervisor assesses four different aspects of the internship:

- the attitude of the student
- the execution of the reflective practice placement
- the final report/article
- the oral presentation

The second assessor provides an assessment of the final report only.

The final report counts for 50% of the final grade, the oral presentation for 25% and the execution of the research also for 25%. Only if marks for each item given by the VU-supervisor and the second assessor are 6 or higher and the attitude is a 'pass', the internship is regarded as sufficient. The final grade is calculated from the marks given by both assessors and, together with other administrative details, is summarized in the final assessment form, done by the master's coordinator.

## Internship I MPA Specialization International Public Health

<b>Course code</b>	AM_1119 ()
<b>Period</b>	Semester 2
<b>Credits</b>	27.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen

<b>Coordinator</b>	dr. D.R. Essink
<b>Examinator</b>	dr. D.R. Essink
<b>Level</b>	500

### Course objective

The aim of the first internship is to apply the competences acquired during the previous courses in a research project in order to ground the knowledge, attitudes and skills of interdisciplinary research. More specifically, the aims of the internships are:

- The student conducts scientific research under supervision;
- The student is able to find scientific information and to evaluate this for the benefit of his or her own research question under supervision;
- The student is able to apply scientific methods and knowledge, to answer research questions and to generate evidencebased knowledge under supervision;
- The student is able to formulate a research question, to choose, to implement and to evaluate the (appropriate) research method, and to phrase the obtained results in report under supervision;
- The student learns to cooperate with researchers of various disciplines;
- The student is able to orally present the research results and to discuss the findings;
- The student obtains a good impression of a potential future field of career.

### Course content

The internship is a compulsory part of the Master MPA. The duration of the internship is 5 months (27 EC). An internship placement must provide the student with the opportunity to learn how to conduct research under supervision. The onsite supervisor of the internship is linked to an academic or research institution.

Internships can be conducted at various locations such as the Ministry of Health, Welfare and Sports, the Public Health Inspectorate, the Health Council, medical organizations such as the municipality health service (GGD), consultancies, the (pharmaceutical) industry and several research institutes, such as universities or e.g. the National Institute for Public Health and the Environment (RIVM).

An internship typically has three phases:

- In the first phase, you write an extended research proposal consisting of an introduction, background, theoretical/conceptual framework, research questions and your research methodology.
- In the second phase, you collect and analyse your (qualitative and/or quantitative) data.
- In the third phase, you do your final analysis and present your findings both orally and in a report. The presentation seminar is a compulsory part of this third phase.

### Form of tuition

Research internship

### Type of assessment

Report (55% ), Oral presentation (15%), Execution (30%) and Attitude (Pass/fail)

Within six weeks after the start of the master internship, an interim evaluation will take place to assess whether there is a reasonable chance of the placement being brought to a successful completion.

The internship is supervised by one and assessed by two lecturers. Both lecturers are members of the academic staff at VU University Amsterdam. The onsite supervision can be carried out by a trainee research assistant (AIO), postdoc or researcher.

### Course reading

Verschuren, P. and Doorewaards, H. (2010) Designing a research project (2nd edition) Eleven International Publishing, The Hague.

Gray, D.E. (2014) Doing Research in the Real World (3rd edition) Sage Publications Ltd, Los Angeles.

Substantial additional reading on both research methodology and the topic of the research, to be searched for by student.

### Entry requirements

To ensure that students do have enough background knowledge, it is required that you have passed the three compulsory courses: 'Qualitative and Qualitative Research Methods', 'Communication Organization and Management', and 'Analysis of Governmental Policy' (grade at least 6).

### Target group

Students MSc MPA year 1

### Remarks

Internships can only start when the draft research proposal and application and agreement form is approved and signed by the specialization coordinator.

The placement may be extended by 6 EC, subject to conditions that can be found in the FALW document "Student placement (internship) and literature regulations". The student must send a request for extension to the MPA Examination Board.

Information on Master internships is made available on Blackboard.

## Internship I MPA Specialization Management and Entrepreneurship

<b>Course code</b>	AM_1120 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	27.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Examinator</b>	dr. J. Maas
<b>Level</b>	500

### Course objective

The aim of the first internship I is to apply the competences acquired during the previous courses in a research project in order to ground the knowledge, attitudes and skills of interdisciplinary research. More specifically, the aims of the internships are:

- The student conducts scientific research under supervision.
- The student is able to find scientific information and to evaluate this for the benefit of his or her own research question under supervision.
- The student is able to apply scientific methods and knowledge, to answer research questions and to generate evidencebased knowledge under supervision.
- The student is able to formulate a research question, to choose, to implement and to evaluate the (appropriate) research method, and to phrase the obtained results in report under supervision.
- The student learns to cooperate with researchers of various disciplines.
- The student is able to orally present the research results and to discuss the findings.
- The student obtains a good impression of a potential future field of career.

### **Course content**

The internship is a compulsory part of the Master MPA. The duration of the internship is 5 months (27 EC). An internship placement must provide the student with the opportunity to learn how to conduct research under supervision. The onsite supervisor of the internship is linked to an academic or research institution.

Internships can be conducted at various locations such as the Ministry of Health, Welfare and Sports, the Nederlandse Mededingingsautoriteit, the Health Council, medical organizations such as the municipality health service (GGD), hospitals, consultancies, the (pharmaceutical) industry and several research institutes, such as universities or e.g. the National Institute for Public Health and the Environment (RIVM).

An internship typically has three phases:

- In the first phase, you write your research proposal consisting of an introduction, background, theoretical/conceptual framework, research questions and your research methodology.
- In the second phase, you collect your (qualitative and/or quantitative) data.
- In the third phase, you do your final analysis and present your findings both orally and in a report. The presentation seminar is a compulsory part of this third phase.

### **Form of tuition**

Research internship

### **Type of assessment**

Report (55%), Oral presentation (15%), Execution (30%) and Attitude (Pass/fail)

Within six weeks after the start of the master internship, an interim evaluation will take place to assess whether there is a reasonable chance of the placement being brought to a successful completion.

The internship is supervised by one and assessed by two lecturers. Both lecturers are members of the academic staff at VU University Amsterdam. The onsite supervision can be carried out by a trainee research assistant (AIO), postdoc or researcher.

## Target group

Students MSc MPA year 1

## Remarks

Internships can only start when the draft research proposal and application and agreement form is approved and signed by the specialization coordinator.

To ensure that students do have enough background knowledge, it is required that you have passed the three compulsory courses: 'Qualitative and Qualitative Research Methods', 'Communication Organization and Management', and 'Analysis of Governmental Policy' (grade at least 6).

The placement may be extended by 6 EC, subject to conditions that can be found in the FALW document "Student placement (internship) and literature regulations". The student must send a request for extension to the MPA Examination Board.

Information on Master internships is made available on Blackboard.

## Internship I MPA Specialization Policy

<b>Course code</b>	AM_1121 ()
<b>Period</b>	Semester 2
<b>Credits</b>	27.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	C.A.C.M. Pittens MSc
<b>Examinator</b>	C.A.C.M. Pittens MSc
<b>Level</b>	500

## Course objective

The aim of the first internship I is to apply the competences acquired during the previous courses in a research project in order to ground the knowledge, attitudes and skills of interdisciplinary research. More specifically, the aims of the internships are:

- The student conducts scientific research under supervision.
- The student is able to find scientific information and to evaluate this for the benefit of his or her own research question under supervision .
- The student is able to apply scientific methods and knowledge, to answer research questions and to generate evidencebased knowledge under supervision.
- The student is able to formulate a research question, to choose, to implement and to evaluate the (appropriate) research method, and to phrase the obtained results in report under supervision.
- The student learns to cooperate with researchers of various disciplines.
- The student is able to orally present the research results and to discuss the findings.
- The student obtains a good impression of a potential future field of career.

## Course content

The internship is a compulsory part of the Master MPA. The duration of the internship is 5 months (27 EC). An internship placement must provide

the student with the opportunity to learn how to conduct research under supervision. The onsite supervisor of the internship is linked to an academic or research institution.

Internships can be conducted at various locations such as the Ministry of Health, Welfare and Sports, the Public Health Inspectorate, the Health Council, medical organizations such as the municipality health service (GGD), consultancies, the (pharmaceutical) industry and several research institutes, such as universities or e.g. the National Institute for Public Health and the Environment (RIVM).

An internship typically has three phases:

- In the first phase, you write your research proposal consisting of an introduction, background, theoretical/conceptual framework, research questions and your research methodology.
- In the second phase, you collect your (qualitative and/or quantitative) data.
- In the third phase, you do your final analysis and present your findings both orally and in a report. The presentation seminar is a compulsory part of this third phase.

#### **Form of tuition**

Research internship

#### **Type of assessment**

Report (55%), Oral presentation (15%), Execution (30%) and Attitude (Pass/fail)

Within six weeks after the start of the master internship, an interim evaluation will take place to assess whether there is a reasonable chance of the placement being brought to a successful completion.

The internship is supervised and assessed by two lecturers. Both lecturers are members of the academic staff at VU University Amsterdam. The onsite supervision can be carried out by a trainee research assistant (AIO), postdoc or researcher.

#### **Target group**

Students MSc MPA year 1

#### **Remarks**

Internships can only start when the draft research proposal and application and agreement form is approved and signed by the specialization coordinator.

To ensure that students do have enough background knowledge, it is required that you have passed the three compulsory courses: 'Qualitative and Quantitative Research Methods', 'Communication Organization and Management', and 'Analysis of Governmental Policy' (grade at least 6). The placement may be extended by 6 EC, subject to conditions that can be found in the FALW document "Student placement (internship) and literature regulations". The student must send a request for extension to the MPA Examination Board.

Information on Master internships is made available on Blackboard.

## Internship II MPA Specialization Communication

<b>Course code</b>	AM_471125 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	30.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. J.F.H. Kupper
<b>Examinator</b>	dr. J.F.H. Kupper
<b>Level</b>	600

### Course objective

The internship is a compulsory part of the Master's programme. The aims of the internship are:

- Learn to independently apply and expand your practical science communication skills in one particular area of the field (writing, multi-media, facilitation, policy and strategy development, content design, etc.).
- Critical self-assessment and reflection on acquired science communication competencies in the field.
- Conduct scientific research independently: assess scientific information, design a research project, apply scientific methods, collect data, report and discuss findings.
- Present and discuss about internship and research outcomes.
- Learn to cooperate with researchers and practitioners of various disciplines.
- Gain an impression of a potential future field of career.

### Course content

When you are enrolled in the VU Science Communication specialization or the UvA Major Science Communication you need to conduct one internship (30 ECTS, 5 months). MPA students that choose the Science Communication specialization also need to do at least one internship (30 ECTS, 5 months) in the Science Communication field. The internship has two possible formats: the full Research Internship and the Reflective Practice Placement (RPP). The complete and up-to-date information about the internship can be found in the SC internship guide line on blackboard (science communication community).

### Form of tuition

Work-based placement

### Type of assessment

Written report and oral presentation.

Within six weeks after the start of the master internship, an interim evaluation will take place to assess whether there is a reasonable chance of the placement being brought to a successful completion. The internship is supervised and assessed by two lecturers. Both lecturers are members of the academic staff at VU University Amsterdam. The day-to-day supervision can be carried out by a trainee research assistant (AIO), postdoc or researcher.

### Target group

**Remarks**

Participation in this compulsory component is only permitted if the student meets the relevant requirements for admission. These requirements are detailed in the Internship guideline MPA (on Blackboard) and in the Academic and Examination Regulations. The work-based placement is subject to the FALW document: "Student placement (internship) and literature regulations". These regulations require detailed written agreements between supervisors and student that specify the conditions for the Master research project. This agreement should be sent for approval by the MPA internship or master co-ordinator at least two weeks before the planned start of the work-based placement. If the proposal is of sufficient quality, you can start your internship. If not, you'll need to adapt your proposal and send it for approval again. You can only start your internship after your research design has been approved. The placement may be extended by 6 EC, subject to conditions that can be found in the FALW document "Student placement (internship) and literature regulations". The student must send a request for extension to the MPA Examination Board. Information on Master internships is made available on Blackboard.

**Internship II MPA Specialization International Public Health**

<b>Course code</b>	AM_471121 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	30.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. B.J. Regeer
<b>Examinator</b>	dr. B.J. Regeer
<b>Level</b>	500

**Course objective**

To apply the theoretical knowledge and practical skills acquired during the theoretical part of the program to a practical research setting. Depending on your specialisation this will be in the field of Management and Entrepreneurship in the Health and Life Sciences, Policy in the Health and Life Sciences, Communication in the Health and Life Sciences or International Public Health. In contrast to the first internship, you now have co-responsibility for the academic quality of your placement. You have only one VU supervisor. Students take part in a research project at the VU or elsewhere. Duration of the internship is 5 months (30 EC).

**Course content**

The internship is a compulsory part of the Master MPA. An internship placement must provide the student with the opportunity to learn how to conduct research under supervision. An internship typically has three phases. In the first phase, you write your research proposal consisting of an introduction, background, theoretical/conceptual framework, research questions and your research methodology. In the second phase, you collect your (qualitative and/or quantitative)

data.

In the third phase, you do your final analysis and present your findings both orally and in a report. The evaluation week is a compulsory part of this third phase. Aim of this week is to reflect practice back to theory.

Internships can be done at various locations such as the Ministry of Health, Welfare and Sports, the Public Health Inspectorate, the Health Council, medical organizations such as the municipality health service (GGD), consultancies, the (pharmaceutical) industry and several research institutes, such as universities or e.g. the National Institute for Public Health and the Environment (RIVM).

You can also conduct your internship abroad. The first and third phase of your internship will still take place in the Netherlands, to ensure the quality and learning experiences.

### **Form of tuition**

Work-based placement

### **Type of assessment**

Written report and oral presentation.

Within six weeks after the start of the master internship, an interim evaluation will take place to assess whether there is a reasonable chance of the placement being brought to a successful completion.

The internship is supervised and assessed by two lecturers. Both lecturers are members of the academic staff at VU University Amsterdam.

The day-to-day supervision can be carried out by a trainee research assistant (AIO), postdoc or researcher.

### **Target group**

Students MSc MPA year 2

### **Remarks**

Participation in this compulsory component is only permitted if the student meets the relevant requirements for admission. These requirements are detailed in the Internship guideline MPA (on Blackboard) and in the Academic and Examination Regulations.

The work-based placement is subject to the FALW document: "Student placement (internship) and literature regulations". These regulations require detailed written agreements between supervisors and student that specify the conditions for the Master research project. This agreement should be sent for approval by the specialisation co-ordinator at least two weeks before the planned start of the work-based placement.

If the proposal is of sufficient quality, you can start your internship.

If not, you'll need to adapt your proposal and send it for approval again. You can only start your internship after your research design has been approved.

The placement may be extended by 6 EC, subject to conditions that can be found in the FALW document "Student placement (internship) and literature regulations". The student must send a request for extension to the MPA Examination Board.

Information on Master internships is made available on Blackboard.

## **Internship II MPA Specialization Management and Entrepreneurship**

<b>Course code</b>	AM_471119 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	30.0

<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. T.P. Groen
<b>Examinator</b>	dr. T.P. Groen
<b>Level</b>	600

### **Course objective**

To apply the theoretical knowledge and practical skills acquired during the theoretical part of the program to a practical research setting. Depending on your specialisation this will be in the field of Management and Entrepreneurship in the Health and Life Sciences, Policy in the Health and Life Sciences, Communication in the Health and Life Sciences or International Public Health. In contrast to the first internship, you now have co-responsibility for the academic quality of your placement. You have only one VU supervisor. Students take part in a research project at the VU or elsewhere. Duration of the internship is 5 months (30 EC).

### **Course content**

The internship is a compulsory part of the Master MPA. An internship placement must provide the student with the opportunity to learn how to conduct research under supervision. An internship typically has three phases.

In the first phase, you write your research proposal consisting of an introduction, background, theoretical/conceptual framework, research questions and your research methodology.

In the second phase, you collect your (qualitative and/or quantitative) data.

In the third phase, you do your final analysis and present your findings both orally and in a report. The evaluation week is a compulsory part of this third phase. Aim of this week is to reflect practice back to theory.

Internships can be conducted at various locations such as the Ministry of Health, Welfare and Sports, the Nederlandse Mededingingsautoriteit, the Health Council, medical organizations such as the municipality health service (GGD), hospitals, consultancies, the (pharmaceutical) industry and several research institutes, such as universities or e.g. the National Institute for Public Health and the Environment (RIVM).

You can also conduct your internship abroad. The first and third phase of your internship will still take place in the Netherlands, to ensure the quality and learning experiences.

### **Form of tuition**

Work-based placement

### **Type of assessment**

Written report and oral presentation.

Within six weeks after the start of the master internship, an interim evaluation will take place to assess whether there is a reasonable chance of the placement being brought to a successful completion.

The internship is supervised and assessed by two lecturers. Both lecturers are members of the academic staff at VU University Amsterdam.

The day-to-day supervision can be carried out by a trainee research assistant (AIO), postdoc or researcher.

### **Target group**

**Remarks**

Participation in this compulsory component is only permitted if the student meets the relevant requirements for admission. These requirements are detailed in the Internship guideline MPA (on Blackboard) and in the Academic and Examination Regulations. The work-based placement is subject to the FALW document: “Student placement (internship) and literature regulations”. These regulations require detailed written agreements between supervisors and student that specify the conditions for the Master research project. This agreement should be sent for approval by the MPA specialisation co-ordinator at least two weeks before the planned start of the work-based placement. If the proposal is of sufficient quality, you can start your internship. If not, you’ll need to adapt your proposal and send it for approval again. You can only start your internship after your research design has been approved. The placement may be extended by 6 EC, subject to conditions that can be found in the FALW document “Student placement (internship) and literature regulations”. The student must send a request for extension to the MPA Examination Board. Information on Master internships is made available on Blackboard.

**Internship II MPA specialization Policy**

<b>Course code</b>	AM_471123 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	30.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	C.A.C.M. Pittens MSc
<b>Examinator</b>	C.A.C.M. Pittens MSc
<b>Level</b>	600

**Course objective**

During the second internship the student applies competences acquired to a research project on a higher level of complexity of the issue studied and research methods used and exercises greater independence in the conduct of the research than in the first internship.

More specifically, the aims of the internships are:

- The student learns to independently conduct scientific research.
- The student is able to independently find scientific information and to evaluate this for the benefit of his or her own research question.
- The student is able to apply scientific methods and knowledge, to answer research questions and to generate evidencebased knowledge.
- The student is able to formulate a research question, to choose, to implement and to evaluate the (appropriate) research method, and to phrase the obtained results in report.
- The student is able to cooperate with researchers of various disciplines.
- The student is able to orally present the research results and to discuss the findings.
- The student obtains a good impression of a potential future field of career.

## **Course content**

The internship is a compulsory part of the Master MPA. The duration of the internship is 5 months (30 EC). An internship placement must provide the student with the opportunity to learn how to conduct research under supervision. The onsite supervisor of the internship is linked to an academic or research institution.

Internships can be done at various locations such as the Ministry of Health, Welfare and Sports, the Public Health Inspectorate, the Health Council, medical organizations such as the municipality health service (GGD), consultancies, the (pharmaceutical) industry and several research institutes, such as universities or e.g. the National Institute for Public Health and the Environment (RIVM).

An internship typically has three phases

- In the first phase, you write your research proposal consisting of an introduction, background, theoretical/conceptual framework, research questions and your research methodology.
- In the second phase, you collect your (qualitative and/or quantitative) data.
- In the third phase, you do your final analysis and present your findings both orally and in a report. The presentation seminar is a compulsory part of this third phase.

## **Form of tuition**

Research internship

## **Type of assessment**

Report (55% ), Oral presentation (15%), Execution (30%) and Attitude (Pass/fail)

Within six weeks after the start of the master internship, an interim evaluation will take place to assess whether there is a reasonable chance of the placement being brought to a successful completion.

The internship is supervised and assessed by two lecturers. Both lecturers are members of the academic staff at VU University Amsterdam. The onsite supervision can be carried out by a trainee research assistant (AIO), postdoc or researcher.

## **Target group**

Students MSc MPA year 2

## **Remarks**

Participation in this compulsory component is only permitted if the student meets the relevant requirements for admission. These requirements are detailed in the Internship guideline MPA (on Blackboard) and in the Academic and Examination Regulations. The work-based placement is subject to the FALW document: "Student placement (internship) and literature regulations". These regulations require detailed written agreements between supervisors and student that specify the conditions for the Master research project. This agreement should be sent for approval by the specialisation co-ordinator at least two weeks before the planned start of the work-based placement. If the proposal is of sufficient quality, you can start your internship.

If not, you'll need to adapt your proposal and send it for approval again. You can only start your internship after your research design has been approved.

The placement may be extended by 6 EC, subject to conditions that can be found in the FALW document "Student placement (internship) and literature regulations". The student must send a request for extension to the MPA Examination Board.

Information on Master internships is made available on Blackboard.

## Management of Corporate Social Responsibility (CSR)

<b>Course code</b>	AM_470583 ()
<b>Period</b>	Period 1
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	prof. dr. J.T. de Cock Buning
<b>Examinator</b>	prof. dr. J.T. de Cock Buning
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

### Course objective

- To understand the aims and internal and external drivers of CSR.
- To understand the role of indexes for corporate social responsible entrepreneurship like ISO, GRS etc.
- To gain insight in the role of CSR certifications
- To explore how to manage Triple P bottom line strategies for sustainable entrepreneurship (especially from the health and life sciences).
- To acquire management skills regarding strategic analysis and benchmarking.
- To identify difficulties in organizational change processes

### Course content

Managers are needed at different levels, from running a food store, leading financial repair of a company in trouble, towards guiding organizations in change towards new challenges. The common message is that managers have to motivate a team (being small or large) to reach the goals set by you. This implies that you are in charge and know what to do. Show leadership and social skills against conflicting interests.

In this course you will work in small teams, each analyzing a different company. By working on a real life company claiming the implementation of CSR policy, you will anticipate to the needed management skills and develop insight in the institutional challenges of sustainable innovations. You will assess at questions such as 'how can innovations be sustainably embedded in organizations?

What impediments arise when we try to change organizations? How can these be managed? What is the corporate drive of working sustainably?' In answering these questions, we will draw upon the fields of action inquiry, corporate governance, organizational development, motivation, business ethics and leadership.

You are challenged to analyze some key articles in which the authors analyze the basic philosophy of sustainable entrepreneurship and the

relationships between sustainability criteria and economic performance. Some criteria are obvious, such as no child labor, no investments in weapons, while other criteria, like the triple P concept (performing in a balance between People, Planet and Profit), need further definition. Specific sustainability criteria for benchmarking and several methods to rate the CSR performance of a company have to be compared and analyzed. You will learn to analyze management challenges from different theoretical and practical levels.

Based on the actual case study your team will interview a CSR-manager of a profit organization in the health and life science domain, to reconstruct the obstacles encountered in the CSR implementation process. Based on this interview and your newly-acquired knowledge you will design strategic management options to cope better with these constraints and obstacles.

### **Form of tuition**

Lectures, self-study, response lectures and case study.

Lectures: 10 hours

Work groups(discussing key literature and response lectures): 14 hours

Presentation and discussing advisory reports: 4 hours

Self study (literature study and case study): remaining hours

In the case study, you'll practice integrating theories and tools, and applying the tools (like SWOT analysis, benchmarking tools) throughout the course.

### **Type of assessment**

Each literature and team assignment has to be concluded with a grade of 5.5 or higher. Lectures and work groups are compulsory.

Individual assessment of written summary of the relevant elements of a key article(25%). Observed attitude and skills in group assignments: presentations, formulation of discussion questions, minutes of the discussion, formulations of learning moments,interview design (25%).  
Group assessment: Case study advisory report (50%)

### **Course reading**

To be announced on Blackboard. The literature will consist of management articles, scientific management literature and management tools.

### **Entry requirements**

Proven knowledge of organizations and management or policy is required (e.g. by having passed COM or AGP).

### **Target group**

Optional course for 2nd year Master students Management, Policy Analysis and Entrepreneurship in Health and Life Sciences (MPA) and the Societal differentiation of the Health, Life & Natural Sciences.

### **Registration procedure**

VU-net registration will close 4 weeks before the start of the course. Based on that number of registered students, we will arrange your team interviews with the companies. Retracting your registration might have detrimental effects on the composition of the teams and on our network of CSR-managers.

### **Remarks**

Active participation of individuals in work group meetings and group assignments is considered a prerequisite to pass the course successfully.

## Management of Innovative Technologies in Community Based Health Care

<b>Course code</b>	AM_1181 ()
<b>Period</b>	Period 2
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	A. van Luijn MSc
<b>Examinator</b>	A. van Luijn MSc
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

### Course objective

- To learn about the development and usage of M-health, E-health, point of care diagnostics, self-monitoring tools, (big)data analysis tools - To give in depth background of the technological developments and usage.
- To familiarize with current technologies in community based health care - To reflect on the consequences of the technological development for the patient, care provider and the health system at large - To be able to put these developments in context. Students are able to reflect critically on practical issues from specific theoretical perspectives. - To engage with care providers, patient groups, technology firms and others to learn about and discuss "hot topics and developments"

### Course content

This course will provide the students with an in-depth study of front-line innovative technologies in community based health care and their further development. The course is developed and coordinated by the Amsterdam health & technology institute (Ahti). Ahti is an institute for education, research, and valorization in the area of Urban Health and technology, using a network of global living labs. The current changes in healthcare systems and health care provision include a central role for technology. With increasing demands on staff and resources technology may contribute to sustainable solutions in health care. In this course we expose students to front-line technologies and challenge them to reflect on the consequences new technologies in healthcare have. In this course the students will focus on technical understanding of the developments as well as how technology can offer cost-effective solutions that can improve the healthcare system as a whole. This topic will be approached based on specific case studies from different perspectives, including patient/consumer, health care provider/entrepreneur, insurer/financier, and technology developer.

### Form of tuition

Management of innovative technologies in community based healthcare is a fulltime course of four weeks (6 ECTS, with a maximum of 25 students. The most recent course schedule is to be found on Blackboard. The total study time is 160 hours. Tuition methods include interactive lectures, workshops, online exchange and self-study. In the course we will make use of blended learning where possible and face to face teaching when needed. The different elements have the following study time: -

lectures: 14 hours - Work groups: 16 hours - Groups assignment: 60 hours  
- Preparing the presentation: 10 hours - Self-study: 60 hours

### Type of assessment

Written exam (40 %), group assignment (40 %), presentation in seminar form (20 %). All parts need to be passed.

### Course reading

To be announced on blackboard

### Target group

Students in the second year of the MSc Management and Entrepreneurship in the Health and Life Sciences

### Remarks

Maximum of 25 students

## Managing Science and Technology in Society

<b>Course code</b>	AM_470586 ()
<b>Period</b>	Period 1
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. T.J. Schuitmaker-Warnaar
<b>Examinator</b>	dr. T.J. Schuitmaker-Warnaar
<b>Teaching staff</b>	dr. B.J. Regeer, dr. J.F.H. Kupper, dr. C.W.M. Dedding, dr. T.J. Schuitmaker-Warnaar, prof. dr. J.E.W. Broerse
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	600

### Course objective

In this course, students:

- acquire knowledge and understanding of philosophical and social science theories on science and technology development.
- gain insight into the mutual shaping of science & technology and society.
- acquire knowledge and understanding of the basic concepts and issues in the field of science and technology studies.
- acquire knowledge and understanding of technological development through Responsible Research and Innovation
- acquire knowledge and understanding of interactive methods for directing and guiding developments in science and technology.
- gain insight into the need for democratization of science and technology.
- learn to recognize and operate the central STS concepts in their own life worlds.
- learn to communicate verbally and in scientific writing about their knowledge and understanding and to critically reflect on that.

### Course content

The 'Managing Science and Technology in Society' course offers an advanced introduction into the academic field of 'Science Technology & Society Studies'.

As an MPA student you are trained to operate at the interface of your

natural science discipline and society, thereby making a contribution to answering the complex social problems arising in these areas. At the dawn of the 21st century, technology and science have an enormous potential for transforming life on earth. At the same time, the dimensions of our human culture shape the directions in which science and technology develop. The production of scientific knowledge and technological artefacts can solve some of our problems, but at the same time they give rise to new problems. During this course you will study the interactions of science and technology with society, and the various ways in which they mutually shape one another. These interactions invoke a lot of questions. Should we embrace genetically modified food? How do new human reproductive technologies interfere with the way we deal with sexuality and social responsibilities?

In this course you will get acquainted with a conceptual framework to critically assess these kinds of questions. It aims at understanding the intertwinement of science, technology and society, and the importance of a broad concern with these interactions, in order to shape our future in the way that we want it.

### **Form of tuition**

'Managing Science and Technology in Society' is a fulltime course of four weeks (6 ECTS). The course schedule is available on blackboard.

Tuition methods include lectures, work groups, a group project and self-study.

The different elements have the following study time:

- lectures: 22 hours
- work groups: 12 hours
- group project: 32 hours
- examination (take-home): 14 hours
- self study (including mini-essays): remaining hours

### **Type of assessment**

The examination consists of:

- Mini-essay 1 (20%)
- Mini-essay 2 (20%)
- Final essay (take-home essay exam) (40%)
- SCOB-project (20%)

All parts need to be passed.

### **Course reading**

The literature of this course consists of selected chapters from the book *An introduction to science and technology studies*, Sergio Sismondo 2010, which can be purchased at the VU book shop. Complementary articles are provided for via blackboard, august 2015.

### **Target group**

Compulsory course within the second year of the Master Management, Policy Analysis and Entrepreneurship for the Health and Life Sciences (MPA)

### **Remarks**

Guest Lecturers:

- Wouter Mensink (SCP, UvA)
- Harro van Lente (UU)
- Steven Flipse (TU Delft, De Proeffabriek)

and others

## Policy, Politics and Participation

<b>Course code</b>	AM_470589 ()
<b>Period</b>	Period 2
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. R.M. Edelenbosch MSc
<b>Examinator</b>	dr. R.M. Edelenbosch MSc
<b>Teaching staff</b>	dr. B.J. Regeer, dr. J.F.H. Kupper, prof. dr. J.E.W. Broerse
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

### Course objective

To further deepen your analytic skills with respect to the assessment of a specific societal problem;

To acquire further insight into the practice of interactive research;

To acquire further insights into specific methods and techniques of interactive research;

To strengthen the skills to design an interactive research project

To practice skills in data collection and analysis;

To learn to set up valid lines of argumentation;

To improve your communication skills;

To improve your skills in working effectively in a project team, through team building, team analysis and feedback.

### Course content

In this course you get the chance to gain experience in the practical implementation of methodologies for interactive research. In a four week policy project you will both improve your focus group research skills and deepen your understanding of the relevant theoretical concepts in the areas of policy studies, science and technology studies and democracy theory. In a group of about ten students you will participate in a real interactive research project which is executed at the Athena institute. In this project you will be trained in and practice various skills for data collection (such as focus group design and facilitation) and data analysis (such as qualitative content analysis).

Specific attention is paid to your personal interactive research skills.

At the end of the course, you prepare a policy report to present your findings. In an oral presentation your team will highlight the main results of your analysis and defend the recommendations you propose.

### Form of tuition

Lectures: 14 hours

Training workshops: 4 hours

Project assignment: 102 hours

focus group execution: 6 hours

Final presentations project results: 4 hours

Self study: remaining hours

### **Type of assessment**

The course does not have an oral or written exam. You will be assessed on the basis of the group assignment, a group presentation and on your individual performance during the course (in the work groups, your facilitation skills in the 'real' focus groups). For all parts a pass grade (> 5.5) needs to be obtained in order to receive a final mark.

Your final mark will be based on: the group report (40%): oral presentation per group(40%): individual performance (20%).

### **Course reading**

To be announced on Blackboard

### **Entry requirements**

Basic knowledge of (interactive) policy processes, policy analysis and relevant research skills are required.

### **Target group**

Optional course for Master students Management, Policy Analysis and Entrepreneurship in Health and Life sciences (MPA), Societal differentiation of the Health, Life & Natural Sciences.

### **Registration procedure**

Registration deadline by VUnet is 4 weeks before the start of the course.

### **Remarks**

As the project depends on team work, attendance is compulsory.

## **Qualitative and Quantitative Research Methods**

<b>Course code</b>	AM_470582 ()
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. J.F.H. Kupper
<b>Examinator</b>	dr. J.F.H. Kupper
<b>Teaching staff</b>	dr. H. Wels, dr. B.J. Regeer, dr. J.F.H. Kupper
<b>Teaching method(s)</b>	Lecture, Study Group, Computer lab
<b>Level</b>	400

### **Course objective**

- Understanding the differences between beta- and gamma research;
- To acquire insight and understanding of a real world research process. This includes knowledge of the character of complex societal issues and the needs, advantages and disadvantages of real world research;
- To acquire insight into various quantitative and qualitative research methods and their underlying theoretical concepts;
- To understand the relative strengths and weaknesses of the various research methods;
- To know how to interpret quantitative and qualitative findings;
- To be able to make an adequate research design for the investigation of a specific complex societal problem.

### Course content

Contemporary societies increasingly face complex social problems, like climate change, HIV/ AIDS or ethnic and religious diversity . These complex problems involve a variety of social actors: policy-makers, professionals, NGOs, industry, science and of course the public at large. Addressing such complex issues demands an approach that investigates, analyzes and integrates the positions and knowledge of different actors. This course offers an (advanced) introduction to various research methods used in real world research: questionnaires, systematic observations using all the senses, surveys and statistics, semi-structured in-depth interviews, as well as focus groups. These methods are commonly used in research into complex problem contexts, communication and opportunities for intervention. Strengths and weaknesses of each research method and technique will be discussed, as well as its possibility to be applied in different societal contexts. Throughout the course, you will apply theoretical knowledge about the various research methodologies in the training of different qualitative and quantitative methods, and in making a research design. In small groups, you are trained in: (1) qualitative research methods such as semi structured interviews and observation techniques, (2) quantitative research methods such as questionnaires, 3) analysis of the data, and (4) writing a research design.

### Form of tuition

Lecture (20h), Training workshops (34h), Research project (107h), Examination (3h).

### Type of assessment

Group assignment (50%) and exam (50%). Both parts need to be graded 6 or higher.

### Course reading

Verschuren, D.E. and Doorewaard, H. (2010). Designing a Research Project (2nd edition)Eleven International Publishing, the Hague. ISBN 978-90-5931-572-3.

Gray, D.E. (2014) Doing Research in the Real World (3rd edition)Sage Publications Ltd, Los Angeles. ISBN 978-1-4462-6019-7

### Target group

Compulsory course in the Master programme Management, Policy Analysis and Entrepreneurship for the Health and Life Sciences (MPA) and compulsory course within the Science communication- and Societal differentiations of Health, Life and Natural Sciences Masters programmes.

### Remarks

Attendance of training workshops is compulsory. For further information please contact Marlous Arentshorst: [m.e.arentshorst@vu.nl](mailto:m.e.arentshorst@vu.nl)

## Reflective Practice Internship Science Communication

<b>Course code</b>	AM_1163 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	30.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen

<b>Coordinator</b>	dr. J.F.H. Kupper
<b>Level</b>	600

### Course objective

The internship is a compulsory part of the Master's programme. The aims of the internship are:

- Learn to independently apply and expand your practical science communication skills in one particular area of the field (writing, multi-media, facilitation, policy and strategy development, content design, etc.).
- Critical self-assessment and reflection on acquired science communication competencies in the field.
- Conduct scientific research independently: assess scientific information, design a research project, apply scientific methods, collect data, report and discuss findings.
- Present and discuss about internship and research outcomes.
- Learn to cooperate with researchers and practitioners of various disciplines.
- Gain an impression of a potential future field of career.

### Course content

When you are enrolled in the VU Science Communication specialization or the UvA Major Science Communication you need to conduct one internship (30 ECTS, 5 months). One of the two possible formats is the Reflective Practice Internship (RPI). The complete and up-to-date information about the internship can be found in the SC internship guide line on blackboard (science communication community).

### Form of tuition

Work-based placement

### Type of assessment

Written report and oral presentation.

Within six weeks after the start of the master internship, an interim evaluation will take place to assess whether there is a reasonable chance of the placement being brought to a successful completion. The internship is supervised and assessed by two lecturers. Both lecturers are members of the academic staff at VU University Amsterdam. The day-to-day supervision can be carried out by a trainee research assistant (AIO), postdoc or researcher.

### Target group

Students MSc Earth science year 2

### Remarks

Participation in this compulsory component is only permitted if the student meets the relevant requirements for admission. These requirements are detailed in the Internship guidelines of Earth science (on Blackboard) and in the Academic and Examination Regulations. The work-based placement is subject to the FALW document: "Student placement (internship) and literature regulations". These regulations require detailed written agreements between supervisors and student that specify the conditions for the Master research project. This agreement should be sent for approval by the science communication co-ordinator at least two weeks before the planned start of the work-based placement. If the proposal is of sufficient quality, you can start your internship. If not, you'll need to adapt your proposal and send it for approval

again. You can only start your internship after your research design has been approved.

The placement may be extended by 6 EC, subject to conditions that can be found in the FALW document "Student placement (internship) and literature regulations". The student must send a request for extension to the Earth science Examination Board.

Information on Master internships is made available on Blackboard.

## Research Internship Science Communication

<b>Course code</b>	AM_1162 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	30.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. J.F.H. Kupper
<b>Level</b>	600

### Course objective

The internship is a compulsory part of the Master's programme. The aims of the internship are:

- Learn to independently apply and expand your practical science communication skills in one particular area of the field (writing, multi-media, facilitation, policy and strategy development, content design, etc.).
- Critical self-assessment and reflection on acquired science communication competencies in the field.
- Conduct scientific research independently: assess scientific information, design a research project, apply scientific methods, collect data, report and discuss findings.
- Present and discuss about internship and research outcomes.
- Learn to cooperate with researchers and practitioners of various disciplines.
- Gain an impression of a potential future field of career.

### Course content

When you are enrolled in the VU Science Communication specialization or the UvA Major Science Communication you need to conduct one internship (30 ECTS, 5 months). One of the two possible formats is the full Research Internship. The complete and up-to-date information about the internship can be found in the SC internship guide line on blackboard (science communication community).

### Form of tuition

Work-based placement

### Type of assessment

Written report and oral presentation.

Within six weeks after the start of the master internship, an interim evaluation will take place to assess whether there is a reasonable chance of the placement being brought to a successful completion.

The internship is supervised and assessed by two lecturers. Both lecturers are members of the academic staff at VU University Amsterdam.

The day-to-day supervision can be carried out by a trainee research assistant (AIO), postdoc or researcher.

**Target group**

Students Earth science year 2

**Remarks**

Participation in this compulsory component is only permitted if the student meets the relevant requirements for admission. These requirements are detailed in the Internship guideline of science communication (on

Blackboard) and in the Academic and Examination Regulations.

The work-based placement is subject to the FALW document: "Student placement (internship) and literature regulations". These regulations require detailed written agreements between supervisors and student that specify the conditions for the Master research project. This agreement should be sent for approval by the science communication internship or master co-ordinator

at least two weeks before the planned start of the work-based placement.

If the proposal is of sufficient quality, you can start your internship.

If not, you'll need to adapt your proposal and send it for approval again. You can only start your internship after your research design has been approved.

The placement may be extended by 6 EC, subject to conditions that can be found in the FALW document "Student placement (internship) and literature regulations". The student must send a request for extension to the earth science Examination Board.

Information on Master internships is made available on Blackboard.

**Research methods for analyzing complex problems**

<b>Course code</b>	AM_1182 ()
<b>Period</b>	Period 1
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. M.E. Arentshorst MSc
<b>Examinator</b>	dr. M.E. Arentshorst MSc
<b>Teaching method(s)</b>	Lecture, Seminar, Computer lab
<b>Level</b>	400

**Course objective**

The objectives of this course are:

- To understand the differences between beta- and gamma research;
- To acquire insight in and understanding of a real world research process, including knowledge of the character of complex societal issues and the needs, advantages and disadvantages of real world research;
- To acquire insight into various quantitative and qualitative research methods, their underlying theoretical concepts and their relative strengths and weaknesses;
- Being able to apply these various quantitative and qualitative research methods in a specific societal context;
- To interpret quantitative and qualitative findings;
- Being able to create an adequate research design for the investigation of a specific complex societal problem.

## **Course content**

Contemporary societies increasingly face complex social problems, such as climate change, HIV/ AIDS or ethnic and religious diversity. These complex problems involve a variety of social actors: policy-makers, professionals, NGOs, industries, science and, of course, the public at large. Addressing these complex issues demands an approach that investigates, analyzes and integrates the positions and knowledge of different actors.

This course offers an (advanced) introduction to various research methods used in real world research, including questionnaires, systematic observations, surveys and statistics, semi-structured interviews, and focus groups. These methods are commonly used in research into complex problem contexts, communication and opportunities for intervention. Strengths and weaknesses of each research method and technique will be discussed, as well as its possibility to be applied in different societal contexts.

## **Form of tuition**

Research Methods for Analyzing Complex Problems is a fulltime course of four weeks (6 ECTS). The total study time is 160 hours. Tuition methods include lectures, workgroups, workshops, group project work and self-study.

The different elements have the following study time:

- lectures 20 hours
- workgroups and training 36 hours
- examination 3 hours
- project work & reading (self-study) Remaining hours

Please note that attendance to the workgroup sessions is compulsory. If you miss one workgroup, with a good reason, you will receive an additional assignment. If you miss more than one workgroup session it is no longer possible to pass the project part of the course.

Attendance to the lectures is highly recommended. In our experience, relying on self-study alone is insufficient to apply the theory of the lectures in the assignments of the workgroups, and to pass the exam.

## **Type of assessment**

The course grade is based on the group assignment 'study design' and the exam. Both aspects need to be graded 6.0 or higher.

Exam 50% of total grade

Group assignment 'study Design' 50% of total grade

## **Course reading**

The literature of this course consists of selected scientific articles that are provided on blackboard, and the books:

- Verschuren, D.E. and Doorewaard, H. (2010). Designing a Research Project

(2nd edition)Eleven International Publishing, the Hague. ISBN 978-90-5931-572-3.

- Gray, D.E. (2014) Doing Research in the Real World (3rd edition)Sage Publications Ltd, United Kingdom. ISBN 978-1-4462-6019-7

An overview of the literature per lecture will be provided on blackboard.

### Target group

The course 'Research Methods for Analyzing Complex Problems' is a compulsory course for first year master students 'Management, Policy Analysis and Entrepreneurship in Health and Life Sciences'. This course is also a compulsory course within the Science communication- and Societal differentiations of Health, Life and Natural Sciences Master programmes. It is an optional course for other Life Sciences Master program students at the VU University.

### Registration procedure

VUnet

### Remarks

Lectures are in English, part of the workgroups are in Dutch. The assignments are written in English.

Please note that attendance to the workgroup sessions is compulsory. If you miss one workgroup, with a good reason, you will receive an additional assignment. If you miss more than one workgroup session it is no longer possible to pass the project part of the course.

Attendance to the lectures is highly recommended. In our experience, relying on self-study alone is insufficient to apply the theory of the lectures in the assignments of the workgroups, and to pass the exam.

course coordinator: Marlous Arentshorst - [m.e.arentshorst@vu.nl](mailto:m.e.arentshorst@vu.nl)

## Science and Communication

<b>Course code</b>	AM_470587 ()
<b>Period</b>	Period 1
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	P. Klaassen MA
<b>Examinator</b>	P. Klaassen MA
<b>Teaching staff</b>	dr. B.J. Regeer, dr. J.F.H. Kupper, drs. ir. M.G. van der Meij, P. Klaassen MA
<b>Teaching method(s)</b>	Lecture, Study Group
<b>Level</b>	500

### Course objective

- Gain theoretical insight in the relationship between science and society,
- Gain insight in the role of science communication in this relationship,
- Acquire knowledge of different theories and models of science communication,
- Acquire knowledge of different strategies, media and activities for science communication,
- Learn how to apply theoretical concepts to real-life examples,
- Development of practical skills for science communication (e.g. writing, discussing).

### Course content

Science is all around us and shapes our lives in many different ways. From the vaccines you need for travelling abroad, to the technological devices you use on a daily basis. At the same time, society shapes the development of science and technology. Science and society influence each other continuously; they communicate. Students of Science Communication are expected to become experts in understanding and designing interaction between science and society. In order for this interaction to be fruitful and valuable for both science and society, it is important to gain in-depth knowledge about the theoretical basis of the field of science communication and understand communication processes at the core of several interfaces; e.g. the communication between scientists from different disciplines, between different sciences and their stakeholders, and between science and the public. This course provides a broad basis in the field of science communication by addressing the main areas of science communication and by discussing and challenging several core concepts within this field. Students are invited to explore some issues in greater depth and active participation in lectures and workgroups is required.

### Form of tuition

Lectures (22 h)

Workgroups (18 h)

Home-study for group assignments (8 h)

Home-study for individual assignments/exam ( 90h)

### Type of assessment

Individual assignments (30%), group assignment (10%), examination (60%).

For all parts a pass grade needs to be obtained.

### Course reading

Academic articles. Direct links to articles will be provided on BlackBoard one month before the beginning of the course.

### Target group

The course Science and Communication is a compulsory course for students of the Master specialisation Science Communication (Wetenschapscommunicatie) and is a prerequisite for the internship. Science and Communication is an optional course for students from other master programs in the health and life sciences.

## Science in Dialogue

<b>Course code</b>	AM_1002 ()
<b>Period</b>	Period 2
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. J.F.H. Kupper
<b>Examinator</b>	dr. J.F.H. Kupper
<b>Teaching staff</b>	dr. J.F.H. Kupper
<b>Teaching method(s)</b>	Study Group, Lecture, Seminar
<b>Level</b>	500

## **Course objective**

To gain knowledge of and insight into:

- the basic concepts and issues in the understanding of science-society interactions, both from a science and technology studies and communication science perspective
- the nature and course of interpersonal and group communication processes relevant to the formal and informal dialogue between science and society
- the nature and form of dialogical science communication, aimed at reflective learning and mutual understanding

To acquire or improve:

- individual skills for effective interpersonal communication
- individual skills for the design and facilitation of the science-society dialogue

## **Course content**

This course examines the public character of scientific controversy and focuses on the communicative aspects of a fruitful science-society dialogue. At the dawn of the 21st century, science, and particularly fields that combine science and engineering such as nanotechnology and synthetic biology, holds a great promise for the progress of our societies. At the same time, these developments are controversial. They lead to a variety of concerns related to risks, benefits and wider moral issues. Nanotechnology creates materials with novel characteristics that help us, but may also contain risks for health and environment. Synthetic biology develops new biological systems that may be very useful, but radically change the nature and meaning of life. Clearly, advances in science do not always match the needs, desires and expectations of society. On the other hand, parts of society might not always appreciate the nature and scope of scientific findings. For a fruitful relationship between science and society, a constructive science-society dialogue is necessary.

This course offers advanced lectures on the basic concepts and issues of dialogical science communication: communication, learning, dialogue, understanding, controversy, democracy. A series of workshops and small group assignments presents communicative tools and spaces such as discussion games, science theatre and multimedia platforms that can be used to design and facilitate science-society interactions. Training workshops will focus on improving the students' individual communication and facilitation skills. The students' individual learning curve as a science communicator and facilitator is self-evaluated by means of a reflection report.

Every course week is completed with a mini-exam.

## **Form of tuition**

Lectures (14h), Workgroups (28h), Training workshops (24h), Dialogue presentations (12h), Selfstudy (remaining hours)

## **Type of assessment**

Group assignment (50%), Take home exam (30%), Reflection report (20%). All assignments must be passed (grade > 6).

## **Course reading**

Is announced on blackboard one month before start of the course

**Target group**

Optional course in the MSc specialization Science Communication

**Remarks**

Independence and a cooperative attitude is expected. Attendance to training workshops is mandatory.

**Science Journalism**

<b>Course code</b>	AM_471014 ()
<b>Period</b>	Period 2
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. J.F.H. Kupper
<b>Examinator</b>	dr. J.F.H. Kupper
<b>Teaching staff</b>	dr. J.F.H. Kupper
<b>Teaching method(s)</b>	Lecture, Study Group, Computer lab
<b>Level</b>	500

**Course objective**

To acquire knowledge of and insight into:

- the concepts, models and issues of science journalism according to contemporary scientific literature
- the criteria for effective science journalism with respect to diverse media
- the representation of science in the media
- the role of science journalism in the use of scientific knowledge in society

To acquire skills in:

- writing popular scientific texts for different genres such as news, background and interview
- science reporting using videos
- designing science communication for different media such as newspaper, radio and internet

Orientation to the professional practice of science journalism

**Course content**

This course teaches the basic principles of science journalism. A series of interactive lectures reviews both the practical as well as the theoretical aspects of science journalism. Topics that are discussed are the translation of science to a language that is both compelling and understandable, the role of journalism in the interaction between science and society, images of science in the media and the ethics of science journalism. The interactive lectures invite you to take your own defensible position with regard to these issues.

Guest lectures provide insight into the professional practice of science journalists. The guest speakers work as freelancer, editor or producer at diverse science media, such as newspapers (NRC, Volkskrant), magazines (NWT), internet (Noorderlicht) and radio (Labyrint).

Finally, the course trains specific skills that you need as a science journalist, such as popular writing, popular science videos,

interviewing, conceptual analysis and program design.

### Form of tuition

Lectures and seminars on theory and practice of science journalism and writing skill training (36h). Considerable time is set aside for performing science journalism in assignments (108h). The assignments are assessed by lecturers and fellow students (peer-review process). Self study (remaining hours).

### Type of assessment

Several individual assignments (60%), several small group assignments (40%). All assignments must be passed (grade > 6).

### Course reading

Announced on Blackboard one month before start of the course

### Target group

All Master students with a Beta-Bachelor degree. Students taking this course as part of their C-specialisation within FALW or FEW will have precedence over other students. Students from other faculties and or universities need to get formal consent from the course coördinator (Frank Kupper) before enrolment.

### Remarks

Course is taught in Dutch. More information: [f.kupper@vu.nl](mailto:f.kupper@vu.nl).

## Science Museology

<b>Course code</b>	AM_470590 ()
<b>Period</b>	Period 3
<b>Credits</b>	6.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. B.J. Regeer
<b>Examinator</b>	dr. B.J. Regeer
<b>Teaching staff</b>	dr. B.J. Regeer, drs. ir. M.G. van der Meij
<b>Teaching method(s)</b>	Lecture, Study Group, Seminar, Fieldwork
<b>Level</b>	500

### Course objective

- Gain insight in the role of museum exhibits in the field of science communication.
- Gain insight in the role of science communication concepts in the context of science museums.
- Apply qualitative research methods to design, conduct, and report on a user research project in museum settings.
- Apply theoretical notions of science communication and exhibit design to advise development of exhibit experience and content design.
- Gain experience in working for an external commissioner.

### Course content

This course is about the role of science museums/centers, zoos and natural history museums in science communication. You will get familiar with theories of science communication in museum settings, and will be

introduced to different styles of communication, different approaches to exhibit design & development, and different methods of research and evaluation of exhibitions.

Guest speakers and lecturers give insight into their profession (1) as science communicators in museums and science centers, (2) as researchers in the field of museology, and/or (3) as professionals in informal science & technology learning environments.

Through individual and group assignments you are encouraged to combine theory and practice, working step-by-step towards (part of) an exhibition (re-)design. The group assignments are commissioned by museums and science centers, such as NEMO, Museon, Naturalis, Delft Science Centre, and Artis.

### **Form of tuition**

Lectures

Workgroups

Workshops

Home-study for group assignments

Home-study for individual assignments

Field work

### **Type of assessment**

Group assignment (50%), presentation (poster and oral) (10%), and individual exam(s) (40%). For the assignments, presentations and all exams a pass-grade must be obtained.

### **Course reading**

Academic articles. Direct links to articles will be provided on Blackboard one month before the beginning of the course.

### **Entry requirements**

It is possible to follow the course as an elective course outside of one of the science communication master specialisations of FALW/FEW. In that case additional reading may be required depending on the student's background.

### **Target group**

Optional course in the Science Communication master specialisation of most of the two-year master programs of the FALW and FEW faculties. Master students from other universities in any scientific field are welcome as well. Additional reading may be required.

### **Remarks**

Guest lectures from and excursions to for instance Artis, NEMO, Naturalis, NorthernLight, Museon, etc.

## **Scientific Writing in English**

<b>Course code</b>	AM_471023 ()
<b>Period</b>	Period 2, Period 5
<b>Credits</b>	3.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	M. van den Hoorn
<b>Examinator</b>	M. van den Hoorn
<b>Teaching method(s)</b>	Study Group

**Course objective**

The aim of this course is to provide Master's students with the essential linguistic know-how for writing a scientific article in English that is well organized idiomatically and stylistically appropriate and grammatically correct.

At the end of the course students

- know how to structure a scientific article;
- know what the information elements are in parts of their scientific article;
- know how to produce clear and well-structured texts on complex subjects;
- know how to cite sources effectively;
- know how to write well-structured and coherent paragraphs;
- know how to construct effective sentences;
- know what collocations are and how to use them appropriately;
- know how to adopt the right style (formal style, cohesive style, conciseness, hedging)
- know how to avoid the pitfalls of English grammar;
- know how to use punctuation marks correctly;
- know what their own strengths and weaknesses are in writing;
- know how to give effective peer feedback.

Final texts may contain occasional spelling, grammatical or word choice errors, but these will not distract from the general effectiveness of the text.

**Course content**

The course will start with a general introduction to scientific writing in English. Taking a top-down approach, we will then analyse the structure of a scientific article in more detail. As we examine each section of an article, we will peel back the layers and discover how paragraphs are structured, what tools are available to ensure coherence within and among paragraphs, how to write effective and grammatically correct sentences and how to choose words carefully and use them effectively.

Topics addressed during the course include the following:

- Structuring a scientific article
- Considering reading strategies: who is your readership? How do they read your text? What do they expect? How does that affect your writing?
- Writing well-structured and coherent paragraphs
- Composing effective sentences (sophisticated word order, information distribution).
- Arguing convincingly – avoiding logical fallacies
- Academic tone and style: hedging – why, how, where?
- Using the passive effectively
- Understanding grammar (tenses, word order, etc.)
- Understanding punctuation
- Referring to sources: summarising, paraphrasing, quoting (how and when?)
- Avoiding plagiarism
- Vocabulary development: using appropriate vocabulary and collocations

### **Form of tuition**

Scientific Writing in English is an eight-week course and consists of 4 contact hours during the first week and 2 contact hours a week for the rest of the course. Students are required to spend at least 6 to 8 hours of homework per week. They will work through a phased series of exercises that conclude with the requirement to write several text parts (Introduction, Methods or Results section, Discussion and Abstract). Feedback on the writing assignments is given by the course teacher and by peers.

### **Type of assessment**

Students will receive the three course credits when they meet the following requirements:

- Students hand in three writing assignments (Introduction, Methods or Results, Discussion) and get a pass mark for all writing assignments;
- Students provide elaborate peer feedback;
- Students attend all sessions;
- Students are well prepared for each session (i.e. do all homework assignments);
- Students actively participate in class;
- Students do not plagiarise or self-plagiarise.

### **Course reading**

Effective Scientific Writing: An Advanced Learner's guide to Better English (A. Bolt & W. Bruins, ISBN 978 90 8659 6171). VU bookstore: €27.95.

### **Target group**

This course is only open to students of the following Master's programmes of the Faculty of Earth and Life Sciences: MSc Biology, Health Sciences, Ecology, Biomolecular Sciences, Biomedical Sciences, Neurosciences, Global Health, Hydrology, and Management, Policy Analysis and Entrepreneurship in Health and Life Sciences.

This course is an alternative for students who are not able to attend Scientific Writing in English in their designated group (this is not applicable for students Hydrology).

### **Registration procedure**

Students should register on time by sending an e-mail to [onderwijsbureau.beta@vu.nl](mailto:onderwijsbureau.beta@vu.nl), selfregistration in VUnet is not possible. Please note that this course will only go through with a minimum of 18 participants and maximum of 24. Students are advised to consult their schedule carefully, since overlap may occur.

If you are registered for a group in VUnet, you are expected to attend all sessions (eight). If you decide to withdraw from the course, please do so in time. This all will avoid a 'fail' on your grade list for not taking part in this course and allows other students to fill in a possible very wanted group spot.

### **Remarks**

- To do well, students are expected to attend all lessons. Group schedules are to be found at [rooster.vu.nl](http://rooster.vu.nl) and on Blackboard.
- If you (expect to) miss a session, please inform the group trainer as soon as possible. If you miss a session without notification, you may not be able to finish the course.

- For any questions concerning this course, please contact [onderwijsbureau.beta@vu.nl](mailto:onderwijsbureau.beta@vu.nl).

## Scientific Writing in English (AM\_MPA)

<b>Course code</b>	AM_1160 ()
<b>Period</b>	Period 4+5+6
<b>Credits</b>	3.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	M. van den Hoorn
<b>Examinator</b>	M. van den Hoorn
<b>Teaching method(s)</b>	Study Group
<b>Level</b>	400

### Course objective

The aim of this course is to provide Master's students with the essential linguistic know-how for writing a scientific article in English that is well organized idiomatically and stylistically appropriate and grammatically correct.

At the end of the course students

- know how to structure a scientific article;
- know what the information elements are in parts of their scientific article;
- know how to produce clear and well-structured texts on complex subjects;
- know how to cite sources effectively;
- know how to write well-structured and coherent paragraphs;
- know how to construct effective sentences;
- know what collocations are and how to use them appropriately;
- know how to adopt the right style (formal style, cohesive style, conciseness, hedging)
- know how to avoid the pitfalls of English grammar;
- know how to use punctuation marks correctly;
- know what their own strengths and weaknesses are in writing;
- know how to give effective peer feedback.

Final texts may contain occasional spelling, grammatical or word choice errors, but these will not distract from the general effectiveness of the text.

### Course content

The course will start with a general introduction to scientific writing in English. Taking a top-down approach, we will then analyse the structure of a scientific article in more detail. As we examine each section of an article, we will peel back the layers and discover how paragraphs are structured, what tools are available to ensure coherence within and among paragraphs, how to write effective and grammatically correct sentences and how to choose words carefully and use them effectively.

Topics addressed during the course include the following:

- Structuring a scientific article
- Considering reading strategies: who is your readership? How do they read your text? What do they expect? How does that affect your

writing?

- Writing well-structured and coherent paragraphs
- Composing effective sentences (sophisticated word order, information distribution).
- Arguing convincingly – avoiding logical fallacies
- Academic tone and style: hedging – why, how, where?
- Using the passive effectively
- Understanding grammar (tenses, word order, etc.)
- Understanding punctuation
- Referring to sources: summarising, paraphrasing, quoting (how and when?)
- Avoiding plagiarism
- Vocabulary development: using appropriate vocabulary and collocations

### **Form of tuition**

Scientific Writing in English is an eight-week course and consists of 4 contact hours during the first week and 2 contact hours a week for the rest of the course. Students are required to spend at least 6 to 8 hours of homework per week. They will work through a phased series of exercises that conclude with the requirement to write several text parts (Introduction, Methods or Results section, Discussion and Abstract). Feedback on the writing assignments is given by the course teacher and by peers.

### **Type of assessment**

Students will receive the three course credits when they meet the following requirements:

- Students hand in three writing assignments (Introduction, Methods or Results, Discussion) and get a pass mark for all writing assignments;
- Students provide elaborate peer feedback;
- Students attend all sessions;
- Students are well prepared for each session (i.e. do all homework assignments);
- Students actively participate in class;
- Students do not plagiarise or self-plagiarise.

### **Course reading**

Effective Scientific Writing: An Advanced Learner's guide to Better English (A. Bolt & W. Bruins, ISBN 978 90 8659 6171). VU bookstore: €27.95.

### **Target group**

Students MPA

### **Registration procedure**

Important: each group has a minimum of 18 and maximum of 24 participants, so students should register on time through VUnet to ensure a place in one of the (designated) groups. If you have registered for a group in VUnet, you are expected to attend all sessions (eight). If you decide to withdraw from the course, please do so in time. This all will avoid a 'fail' on your grade list for not taking part in this course and allows other students to fill in a possible very wanted group spot.

Each semester, one or more open/general groups also take place (with a minimum of 18 participants), for which students may register instead of the designated group for their master programme. Students are advised to consult their schedule carefully, since overlap may occur.

For more information, please check course code AM\_471023.

### Remarks

- To do well, students are expected to attend all lessons. Group schedules are to be found at [rooster.vu.nl](http://rooster.vu.nl) and on Blackboard.
- If you (expect to) miss a session, please inform the group trainer as soon as possible. If you miss a session without notification, you may not be able to finish the course.
- For any questions concerning this course, please contact [onderwijsbureau.beta@vu.nl](mailto:onderwijsbureau.beta@vu.nl).

## thesis MPA

<b>Course code</b>	AM_471126 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	9.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	A. van Luijn MSc
<b>Examinator</b>	A. van Luijn MSc
<b>Level</b>	600

### Course objective

To further improve analytic and reflective skills and deepen your knowledge on a topic in your specialisation. Depending on your specialisation this will be in the field of Health and Life Science-Based Management and Entrepreneurship, Health and Life Science-Based Policy in the Health, Communication in the Health and Life Sciences or International Public Health.

### Course content

The thesis is a compulsory part of the Master Management and Entrepreneurship in the Health and Life Sciences. Writing a thesis provides the student with the opportunity to learn how to gather and analyze scientific literature.

### Form of tuition

Desk research

### Type of assessment

Written thesis and oral presentation.

In general, the thesis will be written under direct supervision of VU-staff. In this case, the VU-staff is responsible for assessing the thesis. For external literature studies, an external supervisor will assess the thesis and propose a grade. A VU-staff will still be accountable for the thesis assessment.

### Target group

Students in the second year of the MSc Management and Entrepreneurship in the Health and Life Sciences who started their MPA curriculum before the academic year 2014-2015.

### Remarks

Students can choose their own topic or apply for a topic from a lecturer from the Athena Institute. Information on Master thesis and application

for thesis topics is made available on Blackboard.

## Thesis MPA

<b>Course code</b>	AM_1122 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	12.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	A. van Luijn MSc
<b>Examinator</b>	A. van Luijn MSc
<b>Level</b>	600

### Course objective

To further improve analytic and reflective skills and deepen your knowledge on a topic in your specialisation. Depending on your specialisation this will be in the field of Management and Entrepreneurship in the Health and Life Sciences, Policy in the Health and Life Sciences, Communication in the Health and Life Sciences or International Public Health.

### Course content

The thesis is a compulsory part of the Master Management, Policy-analysis and Entrepreneurship in the Health and Life Sciences. Writing a thesis provides the student with the opportunity to learn how to gather and analyze scientific literature.

### Form of tuition

Desk research

### Type of assessment

Written thesis and oral presentation.

The thesis will be written under direct supervision of VU-staff.

### Target group

Students in the second year of the MSc Management, Policy-analysis and Entrepreneurship in the Health and Life Sciences.

### Remarks

Students can choose their own topic or apply for a topic from a lecturer from the Athena Institute. Information on Master thesis and application for thesis topics is made available on Blackboard.

## Thesis MPA specialization Communication in the Health and Life Sciences

<b>Course code</b>	AM_1129 ()
<b>Period</b>	Period 1+2+3+4
<b>Credits</b>	12.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen

<b>Coordinator</b>	dr. J.F.H. Kupper
<b>Examinator</b>	dr. J.F.H. Kupper
<b>Level</b>	600

### Course objective

To further improve analytic and reflective skills and deepen your knowledge on a topic in your specialisation. Depending on your specialisation this will be in the field of Management and Entrepreneurship in the Health and Life Sciences, Policy in the Health and Life Sciences, Communication in the Health and Life Sciences or International Public Health.

### Course content

The thesis is a compulsory part of the Master Management, Policy-analysis and Entrepreneurship in the Health and Life Sciences. Writing a thesis provides the student with the opportunity to learn how to gather and analyze scientific literature.

### Form of tuition

Desk research

### Type of assessment

Written thesis and oral presentation.

The thesis will be written under direct supervision of VU-staff.

### Target group

Students in the second year of the MSc Management, Policy-analysis and Entrepreneurship in the Health and Life Sciences.

### Remarks

Students can choose their own topic or apply for a topic from a lecturer from the Athena Institute. Information on Master thesis and application for thesis topics is made available on Blackboard.

## Thesis MPA specialization Health and Life Science-Based Policy

<b>Course code</b>	AM_1128 ()
<b>Period</b>	Period 1+2+3+4
<b>Credits</b>	12.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	C.A.C.M. Pittens MSc
<b>Examinator</b>	C.A.C.M. Pittens MSc
<b>Level</b>	600

### Course objective

To further improve analytic and reflective skills and deepen your knowledge on a topic in your specialisation. Depending on your specialisation this will be in the field of Management and Entrepreneurship in the Health and Life Sciences, Policy in the Health and Life Sciences, Communication in the Health and Life Sciences or International Public Health.

**Course content**

The thesis is a compulsory part of the Master Management, Policy-analysis and Entrepreneurship in the Health and Life Sciences. Writing a thesis provides the student with the opportunity to learn how to gather and analyze scientific literature.

**Form of tuition**

Desk research

**Type of assessment**

Written thesis and oral presentation.

In general, the thesis will be written under direct supervision of VU-staff. In this case, the VU-staff is responsible for assessing the thesis. For external literature studies, an external supervisor will assess the thesis and propose a grade. A VU-staff will still be accountable for the thesis assessment.

**Target group**

Students in the second year of the MSc Management, Policy analysis and Entrepreneurship in the Health and Life Sciences.

**Remarks**

Students can choose their own topic or apply for a topic from a lecturer from the Athena Institute. Information on Master thesis and application for thesis topics is made available on Blackboard.

**Thesis MPA specialization International Public Health**

<b>Course code</b>	AM_1127 ()
<b>Period</b>	Period 1+2+3+4
<b>Credits</b>	12.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. D.R. Essink
<b>Examinator</b>	dr. D.R. Essink
<b>Level</b>	600

**Course objective**

To further improve analytic and reflective skills and deepen your knowledge on a topic in your specialisation. Depending on your specialisation this will be in the field of Management and Entrepreneurship in the Health and Life Sciences, Policy in the Health and Life Sciences, Communication in the Health and Life Sciences or International Public Health.

**Course content**

The thesis is a compulsory part of the Master Management, Policy-analysis and Entrepreneurship in the Health and Life Sciences. Writing a thesis provides the student with the opportunity to learn how to gather and analyze scientific literature.

**Form of tuition**

Desk research

### **Type of assessment**

Written thesis and oral presentation.

The thesis will be written under direct supervision of VU-staff.

### **Target group**

Students in the second year of the MSc Management, Policy-analysis and Entrepreneurship in the Health and Life Sciences.

### **Remarks**

Students can choose their own topic or apply for a topic from a lecturer from the Athena Institute. Information on Master thesis and application for thesis topics is made available on Blackboard.

## Thesis MPA specialization Management and Entrepreneurship

<b>Course code</b>	AM_1130 ()
<b>Period</b>	Ac. Year (September)
<b>Credits</b>	12.0
<b>Language of tuition</b>	English
<b>Faculty</b>	Fac. der Aard- en Levenswetenschappen
<b>Coordinator</b>	dr. T.P. Groen
<b>Examinator</b>	dr. T.P. Groen
<b>Level</b>	600

### **Course objective**

To further improve analytic and reflective skills and deepen your knowledge on a topic in your specialisation. Depending on your specialisation this will be in the field of Management and Entrepreneurship in the Health and Life Sciences.

### **Course content**

The thesis is a compulsory part of the Master Management, Policy-analysis and Entrepreneurship in the Health and Life Sciences. Writing a thesis provides the student with the opportunity to learn how to gather and analyze scientific literature.

### **Form of tuition**

Desk research

### **Type of assessment**

Written thesis and oral presentation.

In general, the thesis will be written under direct supervision of VU-staff. In this case, the VU-staff is responsible for assessing the thesis. For external literature studies, an external supervisor will assess the thesis and propose a grade. A VU-staff will still be accountable for the thesis assessment.

### **Target group**

Students in the second year of the MSc Management, Policy-analysis and Entrepreneurship in the Health and Life Sciences.

### **Remarks**

Students can choose their own topic or apply for a topic from a lecturer from the Athena Institute. Information on Master thesis and application for thesis topics is made available on Blackboard.