



Management, Policy Analysis & Entrepreneurship in Health & Life Sciences MSc
VU University Amsterdam - Fac. der Aard- en Levenswetenschappen - M Management, Policy Analysis and Entr. -
2013-2014

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 2013 - 2014 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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MSc Management and Entrepreneurship in Health and Life Sciences, Capita courses(elective)

Courses:

Name	Period	Credits	Code
Caput Dilemmas in the Implementation of Public Health Programmes		3.0	AM_470565
Caput Institutionalising Participatory Approaches in the South		3.0	AM_470567
Caput Knowledge Integration and (patient) Participation		3.0	AM_470569

Compulsory modules - all specializations

Courses:

Name	Period	Credits	Code
Scientific Writing in English	Ac. Year (September)	3.0	AM_471023

Expired programme components MPA

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

Specialisation Communication

Programme components:

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

at least 6 EC to be obtained

Courses:

Name	Period	Credits	Code
Innovation Behavior and Economy	Period 3	3.0	AM_1052
Science in Dialogue	Period 2	6.0	AM_1002

Science Journalism	Period 2	6.0	AM_471014
Science Museology	Period 3	6.0	AM_470590

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 specialisation Communication	Ac. Year (September)	30.0	AM_471124
Qualitative and Quantitative Research Methods	Period 1	6.0	AM_470582

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	Ac. Year (September)	9.0	AM_471126

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

Courses:

Name	Period	Credits	Code
Caput Dilemmas in the Implementation of Public Health Programmes		3.0	AM_470565
Caput Institutionalising Participatory Approaches in the South		3.0	AM_470567

kies tenminste 2 van deze cursussen

Courses:

Name	Period	Credits	Code
Clinical development and clinical trials	Period 3	6.0	AM_470585
Containment Strategies of Infectious Diseases in Global Context	Period 1	6.0	AM_470127
Disability and Development	Period 2	6.0	AM_470588
Health, Globalisation and Human Rights	Period 2	6.0	AM_470818
Innovation Behavior and Economy	Period 3	3.0	AM_1052
International Comparative Analyses of Health Care Systems	Period 3	6.0	AM_470820
Management of Corporate Social Responsibility (CSR)	Period 2	6.0	AM_470583

compulsory modules 1e year (IPH)

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 specialisation International Public Health	Ac. Year (September)	30.0	AM_471120
Qualitative and Quantitative Research Methods	Period 1	6.0	AM_470582

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	Ac. Year (September)	9.0	AM_471126

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	6.0	AM_470585
Entrepreneurship in Health and Life Sciences	Period 2	6.0	AM_470575
Innovation Behavior and Economy	Period 3	3.0	AM_1052
Management of Corporate Social Responsibility (CSR)	Period 2	6.0	AM_470583
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
Communication, Organization and Management	Period 2	6.0	AM_470572
Internship I MPA specialisation Management and Entrepreneurship	Ac. Year (September)	30.0	AM_471118
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	Ac. Year (September)	9.0	AM_471126

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
Innovation Behavior and Economy	Period 3	3.0	AM_1052
International Comparative Analyses of Health Care Systems	Period 3	6.0	AM_470820
Science in Dialogue	Period 2	6.0	AM_1002

compulsory modules 1e year (Pol)

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 specialisation Policy	Ac. Year (September)	30.0	AM_471122
Policy, Politics and Participation	Period 2	6.0	AM_470589
Qualitative and Quantitative Research Methods	Period 1	6.0	AM_470582

compulsory modules 2e year (Pol)

Courses:

Name	Period	Credits	Code
Ethics in Life Sciences	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	Ac. Year (September)	9.0	AM_471126

Analysis of Governmental Policy

Course code	AM_470571 ()
Period	Period 1
Credits	6.0
Language of tuition	English

Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	prof. dr. J.T. de Cock Buning
Teaching staff	prof. dr. J.T. de Cock Buning
Teaching method(s)	Lecture, Study Group, Computer lab
Level	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. 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: 15 hours
- project: 147 hours (within the project: 18x 1 hour coach meeting)
- self study: (within the project, defined in the group)
- 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%)). Exam has 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

Course code	AM_470584 ()
Period	Period 2
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	prof. dr. H.J.H.M. Claassen
Teaching staff	prof. dr. H.J.H.M. Claassen
Teaching method(s)	Lecture, Computer lab
Level	500

Course objective

- To acquire insight in different legal entities in which to organise a company or enterprise
- To get acquainted with:
 - financial and legal aspects
 - patents and alternative valorization methods
 - marketing and sales aspects of businesses
- To acquire insight in Human Resource Management models
- To get acquainted with different models of financing
- To learn to think and act in line with economic and sustainability issues for the company

Course content

Increasingly, health students will be confronted with a corporate way of thinking in health organisations. To function in such an environment it is critical that students have basic knowledge of fiscal and legal entities and organisational forms of corporate structures (including start-ups). Furthermore, they have to understand what motivates decision makers and financial officers in different companies (also geographical differences). This course comprises a theoretical and a practical part. The theoretical part consists of interactive classes with various experts from the field. Topics that will be dealt with in detail include: 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 practical part consists of bringing the knowledge acquired during the classes into practice in an assignment in which you develop a (personal career) businessplan.

Form of tuition

Lectures:35h

Assignment: 4h

Work on assignment (self study): 40h

Preparing the exam: 81h

Type of assessment

Written exam: 50%

Personal Business Plan: 50%

Both have to be passed

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:

- Robert AI, 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

Caput Dilemmas in the Implementation of Public Health Programmes

Course code	AM_470565 ()
Credits	3.0
Language of tuition	English

Course objective

- The student has acquired in-dept insight in organization, management and policy in the field of Public Health in the South, with a specific focus on the implementation of vaccines programmes
- Has acquired insight in the constraints in the implementation of Public Health programmes i.e. vaccination programmes in the South
- Has applied the acquired insight in the implementation of results and interpretation and to evaluate the efficacy of vaccines programmes.
- Has assessed constructively and systematically strategies to solve the constraints and to improve the efficacy of vaccination programmes through national and international organization

Course content

This caput will increase the student's knowledge in the North- South relation and particularly on the implementation of Public Health Programmes in the South with focus on an international context. Furthermore, the course will give an overall overview of the organization and policy strategies of organizations involved in the implementation of public health programmes which directly is linked with the containment course.

Special attention is given to analyzing the dilemmas and challenges in public health and to generate ideas for future development. The analysis will focus on i) the experiences in working in the field and community based health programmes e. g. vaccination programmes; ii) the constraints and opportunities of the various implementation strategies; iii) methodological aspects of inter disciplinary research; iv) monitoring and evaluation of public health programmes; v) communication strategies to policymakers, professionals and the general public.

Form of tuition

This theoretical course comprises self study and three discussion meetings. After a short introduction the student has to study various scientific articles that are then critically analyzed and discussed in a subsequent meeting.

Type of assessment

Written or oral exam and individual assessment through evaluation assignments

Course reading

Selected chapters and scientific articles.

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

Self study. Course co-ordinator: E. Ruitenbergh.
For information and application: anna.van.luijn@falw.vu.nl

Caput Institutionalising Participatory Approaches in the South

Course code	AM_470567 ()
Credits	3.0

Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. M.B.M. Zweekhorst

Course objective

- To develop a detailed understanding of the importance of participation strategies for sustainable development
- To understand the difficulties that have been identified for institutionalising interactive approaches within existing organisations
- To obtain insight into different strategies to institutionalize interactive approaches.
- To acquire knowledge on the learning organisation.

Course content

During the past three decades participation has become increasingly visible as an issue in development. It is recognized that participation is a key element in poverty eradication and sustainable development. Methodologies to enhance participation are now commonly used in development projects and 'participation' has become a development orthodoxy. However, it is one thing to acknowledge the effectiveness of participatory approaches, but another to apply these approaches consistently over longer periods of time. This requires institutionalisation of these approaches within the organisations concerned, so as to build the necessary capacity. Most organisations are not well adapted to the application of participatory approaches. Some organisational change is therefore likely to be necessary if participatory approaches are to be institutionalised successfully. In this theoretical course you study in depth scientific literature about various theoretical concepts and practical experiences of institutionalisation processes of interactive approaches that were undertaken by organisations in the South.

Form of tuition

This theoretical course comprises self study. After a short introduction you study various scientific articles that are then critically analyzed.

Type of assessment

Individual assessment through an assignment

Course reading

Selected scientific articles.

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

Self study. Basic knowledge on organisation and management is required. For more information and application: anna.van.luijn@falw.vu.nl

Caput Knowledge Integration and (patient) Participation

Course code	AM_470569 ()
Credits	3.0

Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	prof. dr. J.E.W. Broerse

Course objective

- To acquire in- depth understanding of different types of knowledge and their specific characteristics and values;
- To acquire detailed knowledge concerning models on knowledge integration and transdisciplinarity, and their key concepts;
- To acquire the ability to translate from theory to practice with respect to participation strategies.
- To acquire insight into the theory and practise of patient participation in health research.

Course content

We are living in an increasingly globalized World. Science and policy is facing increasingly complex problems that cannot be effectively addressed from one scientific discipline and one perspective. Solving complex problems requires the integration of knowledge from different scientific disciplines as well as the integration of scientific knowledge and practical, experiential knowledge about the problem context. This type of broad knowledge integration is called transdisciplinary research. The topic of transdisciplinary research is therefore becoming increasingly important.

During this 2- weeks course you will read various scientific articles that contribute to different visions and models to describe and facilitate knowledge integration. Particular attention is paid to the role and value of `lay' knowledge (for example patients, experiential knowledge) for research in the health and life sciences. As a specification of knowledge integration you will analyze different practices of patient participation in health research as described in literature. You will address questions, such as who should participate, when, how and why, in order to realize patient participation in health research in the most effective way.

Form of tuition

This theoretical course comprises self study and three discussion meetings. After a short introduction you study various articles that are then critically analyzed and discussed in a subsequent meeting.

Type of assessment

Individual assessment through an exam

Course reading

Selected scientific articles.

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

Self study. For more information and application:

anna.van.luijn@falw.vu.nl

Clinical development and clinical trials

Course code	AM_470585 ()
Period	Period 3
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	W.S. Konijn MSc
Teaching staff	prof. dr. H.J.H.M. Claassen
Teaching method(s)	Lecture, Computer lab, Study Group
Level	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

Communication, Organization and Management

Course code	AM_470572 ()
Period	Period 2
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. J. Maas
Teaching staff	dr. H. Wels, prof. dr. F. Scheele, dr. M.B.M. Zweekhorst
Teaching method(s)	Lecture, Study Group
Level	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), self study, training workshops (12 hours), self-study and writing project assignment (approximately 120 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

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

Course objective

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 programmes
- Has acquired insight in theoretical concepts and methods to interpret results, evaluations and the effectiveness of programs
- Has learned to develop and apply risk assessment, risk management, and risk communication methods
- 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, 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.

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.

Lecturers may make further readings available on Blackboard.

Entry requirements

Basic knowledge about microbiology and immunology.

Recommended background knowledge

Basic knowledge about infectious diseases

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 information at secretariaat.athena@falw.vu.nl

Remarks

Guest lecturers:

Dr. Jim van Steenberghe (RIVM/LUMC)

Dr. Peter Gondrie (KNCV)

Dr. Richard Anthony (Royal Tropical Institute)

Dr. Merel Langelaar (Inspectorate Public Health)

Prof. dr. Maarten Postma (RUG)

Dr. Kitty Maassen (RIVM)

Dr. Elena Pinelli (RIVM)

Prof. dr. Robert Sauerwein (UMC Nijmegen)

Prof. dr. Cees Hamelink (VU)

Prof. dr. Ab Osterhaus (EMC Rotterdam)

Disability and Development

Course code	AM_470588 ()
Period	Period 2
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. W.H. van Brakel MD
Teaching staff	H.B. Miranda Galarza MSc, F.M. Budge MSc
Teaching method(s)	Lecture, Study Group
Level	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,
- Measurement of disability,
- Disability-relevant research methods, including survey methods, examples of disability research
- An introduction to community-based rehabilitation.

Form of tuition

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

The programme comprises 168 study hours, divided as follows:

- Lectures: 36
- Tutorial groups: 18
- Other events: 12
- Self-study: 102

Type of assessment

Participation in tutorial groups: 10%
Take-home examination, submitted electronically: 60%
Scientific article: 30%

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

Jacqueline Kool, MA
Lydia la Rivière-Zijdel, MA

Entrepreneurship in Health and Life Sciences

Course code	AM_470575 ()
Period	Period 2
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	prof. dr. E. Masurel
Teaching staff	prof. dr. E. Masurel
Teaching method(s)	Lecture, Study Group
Level	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
- self study 65 hours
- examination 4 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. For information and application:

anna.van.luijn@falw.vu.nl

Ethics in Life Sciences

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

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. Attendance is compulsory.

Health, Globalisation and Human Rights

Course code	AM_470818 ()
Period	Period 2
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. C.W.M. Dedding
Teaching staff	prof. dr. P. Heutink, dr. M.G.B.C. Bertens
Teaching method(s)	Lecture, Study Group
Level	500

Course objective

To acquire knowledge and understanding of the relationship between global public health issues and the global protection of human rights
 To analyse how violations of human rights affect health and well-being
 To learn methods of human rights assessment in relation to innovations in health technology
 To acquire insights into the cultural dimensions of human rights values in relation to public health

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: 10 hours

Group project, simulation and exam: 8 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):

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 Anna van Luijn: a.van.luijn@vu.nl

Innovation Behavior and Economy

Course code	AM_1052 ()
Period	Period 3
Credits	3.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. T.P. Groen
Teaching method(s)	Lecture
Level	500

Course objective

Final attainment level

To get acquainted with theories on innovation

To obtain a deeper understanding of the influence of behavior on costs of health

To acquire knowledge on innovations, economic and business models

To gain insight in efficiency and effectiveness of health care systems

behavior on innovation

To improve communication skills

To practice modeling of health care innovation

Course content

Delivering affordable health to the global population is among the world's most pressing problems. To make progress, we will need to work across boundaries, bringing together people, ideas, disciplines and perspectives from across the globe. The healthcare system is a highly evolved ecosystem that has developed over decades and is plagued by high costs and perverse incentives. We seek new ideas about how to deliver affordable health. Developing new ways to help patients understand and manage health problems.

At any point in time, an individual's health is affected by numerous factors including genetics, social and economic status, the effectiveness of the healthcare system, and behavior. Certainly, we need to improve the efficiency and effectiveness of the healthcare system, but that alone will not solve the problem. Without behavior modification, health will be compromised and healthcare costs uncontrollable. New ideas are required about personal incentives and ways to encourage healthy behavior patterns, while discouraging certain behaviors that are detrimental to health.

The cost and effectiveness of existing drug discovery and delivery is becoming more and more problematic even as we understand more about genetics and biology. We have to discover and implement new ways to identify and deliver cost-effective therapies to individual patients and broader populations. Doing so will require new applications of computation and data science technologies, new regulatory ideas and new business models.

Form of tuition

27 hrs. Lectures,
6 hrs training workshops
127 hrs project assignment and self study

Type of assessment

Written exam (60%;) and 40% Project

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. T. Groen (Athena)

International Comparative Analyses of Health Care Systems

Course code	AM_470820 ()
Period	Period 3
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. D.R. Essink

Teaching staff	prof. dr. J.E.W. Broerse, dr. D.R. Essink, dr. T.J. Schuitmaker-Warnaar
Teaching method(s)	Lecture, Study Group
Level	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

'Research methods for needs assessments' 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
- (project) self study 108 hours
- pass/fail test 2 hours

Attendance to the assignment sessions is compulsorily

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. Elsevier
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), 1191-1199.

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:

Prof. dr. Joep Lange

dr. Rob Baltussen, health economics at (UMCG)

Dr. Michael van den Berg (RIVM)

Barend Gerretsen (KIT)

Prof. dr. Wienke Boerma (NIVEL)

Internship I MPA specialisation Communication

Course code	AM_471124 ()
Period	Ac. Year (September)
Credits	30.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. M.B.M. Zweekhorst

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. Under supervision of VU-staff, the 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).

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 1

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 I MPA specialisation International Public Health

Course code	AM_471120 ()
Period	Ac. Year (September)
Credits	30.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. M.B.M. Zweekhorst

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. Under supervision of VU-staff, the 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).

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 I MPA specialisation Management and Entrepreneurship

Course code	AM_471118 ()
Period	Ac. Year (September)
Credits	30.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. M.B.M. Zweekhorst

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. Under supervision of VU-staff, the 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).

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 from the MSc MPA year 1

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 I MPA specialisation Policy

Course code	AM_471122 ()
Period	Ac. Year (September)
Credits	30.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. M.B.M. Zweekhorst

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. Under supervision of VU-staff, the 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).

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 1

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 Communication

Course code	AM_471125 ()
Period	Ac. Year (September)
Credits	30.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. M.B.M. Zweekhorst
Level	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 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 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

Course code	AM_471121 ()
Period	Ac. Year (September)
Credits	30.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. M.B.M. Zweekhorst
Level	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 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 Management and Entrepreneurship

Course code	AM_471119 ()
Period	Ac. Year (September)
Credits	30.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. M.B.M. Zweekhorst

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 from the 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 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 Policy

Course code	AM_471123 ()
Period	Ac. Year (September)
Credits	30.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. M.B.M. Zweekhorst

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 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.

Management of Corporate Social Responsibility (CSR)

Course code	AM_470583 ()
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Period	Period 2
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	prof. dr. J.T. de Cock Buning
Teaching method(s)	Lecture, Study Group
Level	500

Course objective

- To understand the aims and internal and external drivers of CSR.
- Indexes for corporate social responsible entrepreneurship like ISO, GRS etc.
- To gain insight in the role of CSR certifications
- To acquire an understanding 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 understand 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 the management skills and insight in sustainable innovations are deepened. 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 importance 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 assignment you will interview a CSR-officer of a profit organizations in the health and life science domain, to reconstruct the obstacles encountered in the 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. 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

Essay containing a summary of the relevant elements of the literature (30%). Attitude and skills assessment (20%). Case study (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.

Managing Science and Technology in Society

Course code	AM_470586 ()
Period	Period 1
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. T.J. Schuitmaker-Warnaar
Teaching staff	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
Teaching method(s)	Lecture, Study Group
Level	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 the approach of constructive technology assessment.
- 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. The total study time is 168 hours. 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
- self study (including mini-essays) 88 hours
- examination (take-home) 14 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%)

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 2013.

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)

More information: T.J.Schuitmaker@vu.nl

Policy, Politics and Participation

Course code	AM_470589 ()
Period	Period 2
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	prof. dr. J.T. de Cock Buning
Teaching staff	dr. B.J. Regeer, dr. J.F.H. Kupper, prof. dr. J.E.W. Broerse
Teaching method(s)	Lecture, Study Group
Level	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, training workshops, project assignment

Type of assessment

Individual evaluation based on personal performance in the project group and assessment of various group products (report and presentation). All parts need to be passed.

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), Societal differentiation of the Health, Life & Natural Sciences.

Remarks

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

Attendance is compulsory.

Qualitative and Quantitative Research Methods

Course code	AM_470582 ()
Period	Period 1
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. J.F.H. Kupper
Teaching staff	dr. H. Wels, dr. B.J. Regeer, dr. J.F.H. Kupper, dr. ir. R. Hoopman
Teaching method(s)	Lecture, Study Group, Computer lab
Level	400

Course objective

Understanding the differences between beta- and gamma research
 To acquire insight and understanding of a transdisciplinary research process. This includes knowledge of the character of and need for transdisciplinary approaches, and their advantages and disadvantages
 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 acquire insight and understanding of the possibilities to integrate quantitative and qualitative research information
 To be able to make an adequate transdisciplinary research design for the investigation of a specific 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 a transdisciplinary 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 transdisciplinary research: questionnaires, systematic observations using all the senses, surveys and statistics, semi-structured in-depth interviews, as well as several interactive and participatory methods. These methods are commonly used in transdisciplinary 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, students 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 transdisciplinary research design.

Form of tuition

Lecture (20h), Training workshops (30h), Self-study (107h), Examination (3h).

Type of assessment

Group assignment (50%) and exam (50%). Both parts need to be passed (6).

Course reading

Announced on blackboard one month before course starts

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 harry.wels@falw.vu.nl.

Science and Communication

Course code	AM_470587 ()
Period	Period 1
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. B.J. Regeer
Teaching staff	dr. B.J. Regeer, dr. J.F.H. Kupper, T. de Lange MSc, B.M. Tielemans
Teaching method(s)	Lecture, Study Group
Level	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.

Remarks

Guest lecturers amongst others:

A. van der Plas (TNO)

F. van Dam (CSG, Centre for Society and the Life Sciences)

Science in Dialogue

Course code	AM_1002 ()
Period	Period 2
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. J.F.H. Kupper
Teaching staff	dr. J.F.H. Kupper

Teaching method(s)	Study Group, Lecture
Level	500

Course objective

To gain knowledge and insight into:

- the basic concepts and issues in the understanding of science-society interactions, both from a philosophical 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 mutual understanding and learning

To acquire or improve:

- the individual student's skills for effective interpersonal communication
- the individual student's 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 monitored by means of a personal development plan. The course is completed with an individual essay assignment about the sense and nonsense of the science-society dialogue.

Form of tuition

Lectures (14h), Workgroups (28h), Training workshops (24h), Selfstudy, (82h), Dialogue presentations (12h)

Type of assessment

Group assignment (50%), Take home exam (30%), Mini portfolio (20%)

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 indispensable.

Science Journalism

Course code	AM_471014 ()
Period	Period 2
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. J.F.H. Kupper
Teaching staff	dr. J.F.H. Kupper, W.J. Breukers MSc, dr. M.J.W. Bos
Teaching method(s)	Lecture, Study Group, Computer lab
Level	500

Course objective

To acquire knowledge and insight into:

- the popularization of natural scientific knowledge and the use of different media
- the criteria for effective science journalism with respect to diverse media
- the role of science journalists in the debate about knowledge in society

To acquire skills in:

- writing popular scientific texts for different genres such as news, background and interview
- 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, 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 (16h).

Type of assessment

Individual exam (20%), Individual Assignments (50%, Small Group Assignments (30%)

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-differentiation 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 co-ordinator (Frank Kupper) before enrolment.

Remarks

Course is taught in Dutch. More information: f.kupper@vu.nl.

Science Museology

Course code	AM_470590 ()
Period	Period 3
Credits	6.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. B.J. Regeer
Teaching staff	dr. B.J. Regeer, drs. ir. M.G. van der Meij, T. de Lange MSc
Teaching method(s)	Lecture, Study Group
Level	500

Course objective

- Gain insight in the role of museum exhibits in the field of science communication.
- Apply theoretical notions of science communication and science education, to conduct science communication research in museum settings.
- Apply qualitative and quantitative research methods to design, conduct, and report on a research project in museum settings.
- Apply theoretical notions of science communication, science education and exhibit design to advise on adjustments and/or development of exhibitions.

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 and informal science education in museum setting, and will be introduced to different educational methods as well as styles of communication, different approaches to exhibit design & development, and different methods of research and evaluation of exhibitions.

Guest speakers 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 developing informal science & technology learning programs.

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

Form of tuition

Lectures (14 h)

Workgroups (40 h)

Home-study for group assignments (64 h)

Home-study for individual assignments (32 h)

Type of assessment

Group assignment (40%), presentations (poster and oral) (10%), and exams (take-home and written) (50%). For all the assignment, 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

Bachelor in any of the Beta Sciences

Target group

Optional course in the C-differentiations (Science Communication) 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.

Remarks

Guest lecturers:

E. Hamstra (Northernlight)

C. Vermeulen (Artis)

M. van der Meer (Delft Science Centre)

I. van Zeeland (Naturalis)

And possibly additional guest lecturers from NEMO, Boijmans van Beuningen, Museon, Van Gogh Museum, etc.

Scientific Writing in English

Course code	AM_471023 ()
Period	Ac. Year (September)
Credits	3.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	M. van den Hoorn
Teaching method(s)	Study Group
Level	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

This course is only open to students of the Master's programmes of the Faculty of Earth and Life Sciences mentioned below. These students are only eligible to the course if they have already conducted scientific research (e.g. for their Bachelor's thesis) or if they will be working on a research project when taking Scientific Writing in English.

Faculty of Earth and Life Sciences - Master's programmes:

- Biology;
- Health Sciences;
- Ecology;
- Biomolecular Sciences;
- Biomedical Sciences;
- Neurosciences;
- Global Health;
- Management, Policy Analysis and Entrepreneurship in Health and Life Sciences.

Remarks

- To do well, students are expected to attend all lessons. Group schedules are to be found at rooster.vu.nl and on Blackboard.
- A VUnet registration for this course is necessary in order to enroll or be enrolled in a Blackboard group. The VUnet registration automatically gives access to the corresponding Blackboard site.
- Group enrollment only takes place via Blackboard. For open/general groups: students have to enroll themselves following FALW programmes containing this course. For group assigned to specific studies, students are enrolled by the course coordinator).
- Make sure Scientific Writing in English does not overlap with another course.
- If you have registered for a group in Blackboard, you are expected to attend all sessions (eight). If you decide to withdraw from the course, do so in time, both on Blackboard and in VUnet. 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.
- 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 the course coordinator Marieke Zantkuijl: m.c.l.zantkuijl@vu.nl

thesis MPA

Course code	AM_471126 ()
Period	Ac. Year (September)
Credits	9.0
Language of tuition	English
Faculty	Fac. der Aard- en Levenswetenschappen
Coordinator	dr. M.B.M. Zweekhorst

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 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.

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.