Teaching and Examination Regulations

Master's Degree Programme

B. programme-specific section

Management, Policy Analysis and Entrepreneurship in the Health and Life Sciences

Academic year 2015-2016

Section B: Programme-specific section

Contents

Section B: Programme-specific section

1. General provisions

Article 1.1 Definitions

MPA Management, Policy Analysis and Entrepreneurship in the Health and Life Sciences

Article 1.2 Degree programme information

1. The programme Management, Policy Analysis and Entrepreneurship in the Health and Life Sciences (MPA) CROHO number 60803 is offered on a full-time basis and the language of instruction is English.
2. The programme has a workload of 120 EC.
3. A unit of study comprises 6 EC or a multiple thereof, except for the thesis (12 EC), two internships (respectively 27 EC in year one and 30 EC in the second year EC) and five 3 EC courses: (1) Ethics and (2) Innovation, Behaviour and Economy, and (3) Scientific Writing in English (4) Epidemiology and (5) Clinical Development and Clinical Trials

Article 1.3 Intake dates

The programme is offered starting in the first semester of the academic year only.
(1 September). The intake date(s) mentioned in this paragraph ensure(s) that a programme can be completed within the nominal study duration set for the programme.

2. Programme objectives and exit qualifications

Article 2.1 Programme objective

The MPA programme aims to develop researchers who are able to analyze and address complex problems by incorporating a wide diversity of perspectives from science and society. The MPA programme specifically focuses on conducting research at the interface of science and society, aiming to contribute to the solution of complex societal problems. The programme 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 programme, 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 specialisations with the following objectives:

Health and life sciences-based Policy: This specialization equips the Master's graduate with insight in theories and strategies to address societal issues through governmental policy at various levels. Special knowledge and understanding is obtained in the discipline of policy analysis. Various forms of 'governance' and in particular interactive policy-making are discussed. In addition, the student acquires skills in data collection methods: from various written and digital sources, interviews to focus group sessions. At the end the student is independently able to facilitate group processes for interactive policy-making and apply various analytical tools to structure the multidisciplinary data towards strategic designed advices.

Health and Life Sciences-Based Management and Entrepreneurship: This specialization aims to provide the Master's graduate with insight in the management process of translating scientific knowledge to societally relevant innovations in the health and life sciences. Relevant theories on management, policy making, leadership, finance and law are discussed. The Master's graduate has the ability to develop and critically assess business plans, understands the relations between business and society and has acquired relevant scientific data collection methods and analytical tools.

International Public Health: The Master's graduate with a specialization in International public health has a wide-ranging insight into current and future challenges in international public health, their main causes as well as applied and potential interventions. The Master's graduate obtains special

knowledge on relevant concepts from various disciplines (including epidemiology, policy science, anthropology, management studies, biomedical sciences and health sciences). The Master's graduate has the ability to conduct scientific research in the field of international public health addressing international public health challenges and to critically assess the results of international public health research. He/she possesses knowledge of current theories and the key research questions in this field and has insight into the scientific and social relevance of this subject area.

Communication in the Health and Life Sciences: Communication about science issues takes place not only between peers but also between scientists and 'end users' and the general public. This makes it a complex and dynamic field of research and practice; e.g. on patient participation in health research, the use and effects of media metaphors and hypes, and public understanding of emergent technologies. The Master's graduate with this specialization has 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.

Article 2.2 Exit qualifications

In all events, a graduate of the degree programme will have the following:

The final attainment levels of the MPA programme with regard to the Dublin descriptors are given below.

Dublin descriptor 1: Knowledge and understanding
The graduate has theoretical and practical knowledge of management, policy analysis and entrepreneurship in the health and life sciences, in particular within the field of his/her specialization
The graduate:

a. can demonstrate knowledge and understanding that are founded upon and extend the knowledge and understanding typically associated with the scientific discipline at the bachelor level (at least in one specific area of that discipline);
b. has insight into the various relevant disciplines in the social and behavioral sciences. More specifically, the student acquires insight into:
   - important concepts and theories in the field of policy science, management studies, applied philosophy and science, technology and society studies; -
   - specialisation the relation of these gamma sciences to the beta sciences, in particular health and life sciences;
c. has insight into concepts and the latest theories, research methodologies, analytical models and important research questions related to interdisciplinary research for addressing societal problems;
d. has knowledge of, and insight into, relevant concepts and theories for effective communication and collaboration;
e. understands group processes and knows methods and techniques to facilitate them within the framework of interdisciplinary research.

Dublin descriptor 2: Applying knowledge and understanding
The graduate is experienced in carrying out interdisciplinary research, in applying techniques specific to the subject area and in applying scientific knowledge to societal problems. The graduate:

a. can apply independently the research methodology used within the research field of specialisation;
b. has the ability to integrate knowledge from the beta and gamma sciences, as well as from science and practice;
c. can apply scientific knowledge to formulate solutions to societal problems and assess them for appropriateness and societal relevance, while considering ethical and normative issues;
d. is able to reflect on the ethical aspects of research and its uses, and include these deliberations in the decision-making process;
e. adopts an appropriate attitude towards the correct and unbiased use and presentation of data.

Dublin descriptor 3: Making judgments
The graduate is able to independently and critically judge information.
The graduate is able to:

a. independently acquire information in relevant areas in the health and life sciences and social and behavioral sciences through a literature review and by conducting empirical research, as well as evaluate such information critically;
b. select and order information, distinguish essentials from trivialities, and recognize connections;
c. independently and critically analyze research in the field of specialization, in relation to its design, planning and execution, and to the results obtained;
d. formulate personal learning objectives and critically evaluate own performance, both introspectively and in discussion with others.

Dublin descriptor 4: Communication

The graduate is able to transfer knowledge and skills related to his/her subject area to other people and to adequately reply to questions and problems posed within society. The graduate:

a. has acquired skills to report orally and in writing on research results in English;
b. has the ability to communicate research conclusions, and the knowledge and rationale underpinning them, to specialist audiences and non-specialist audiences clearly and unambiguously;
c. can collaborate with researchers from various scientific disciplines as well as professionals from industry and healthcare, policymakers and the general public;
d. can make essential contributions to scientific discussions about plans, results and consequences of research.

Dublin descriptor 5: Learning skills

The graduate has developed learning skills that enable him/her to continue with self-education and development within the subject area. The graduate:

a. is able to understand and summarize the scientific literature within the field of specialisation;
b. has acquired skills to develop a research plan, giving details of the problem statement, objectives, research questions, research approach, research methods, and planning;
c. is familiar with the general scientific journals, such as *Nature* and *Science*, and with journals in the specialisation, such as *Research Policy*, *Health Policy*, *Science, Technology & Human Values*, *Social Science & Medicine*, and *International Journal on Technology Managemen*t;
d. is familiar with relevant computer software;
e. has the learning skills to allow him/her to continue to study in a manner that may be largely self- directed or autonomous (life-long learning).

3. Further admission requirements

Article 3.1 Admission requirements

1. Admission to the Master's programme is possible for an individual who can demonstrate that he/she has the following knowledge, understanding and skills in the field of health and life sciences at the Bachelor's degree level, obtained at an institution of academic higher education.

   Students with a BSc degree in one of the following programmes from a Dutch university are eligible for direct admission to the MPA programme: Biology, Biomedical Sciences, Health Sciences, Health and Life Sciences, Medical Natural Sciences, Medical Informatics, Bioinformatics, Biochemistry, Pharmaceutical Sciences, Human Movement Sciences, Beta-gamma studies (with a major in Chemistry, Ecology and Evolution, Biomedical Sciences, Brain and cognition, Physics and astronomy, Mathematics), Psychobiology, HLO Biology and Medical Laboratory Research, Medicine, University Colleges with at least a minor in a beta subject. Students with a bachelor programme in Natural Sciences and innovations or Science, Business and Innovations are eligible for admission to the MPA programme. However, the beta component of the bachelor is assessed by the admission board.

   The admission board might decide that the student needs to conduct an additional 6 EC Science course instead of an optional course.

   Students with Bachelor of Science degree in another subject or with a Bachelor diploma obtained at a (inter)national university or Dutch institute of higher education, may be admitted to the programme.

2. The Admissions Board will investigate whether the interested person meets the admission

requirements. Students should have at least 120 EC of beta related courses in their bachelor program. In addition, students who have conducted the premaster programs Biology, Biomedical Sciences , and Health Science of the VU University are eligible for admission.

3. When the programme commences, the candidate must have fully completed the Bachelor's programme or pre-Master's programme allowing admission to this Master's programme.

Article 3.2 Pre-Master's programme

1. Students with a Bachelor's degree in a field that corresponds to a sufficient extent with the subject area covered by the Master's programme can request admission to the VU pre-Master's programme of health sciences ("Pre-Masterprogramma Gezondheidswetenschappen"), or pre-master program Biology or pre master program Biomedical Sciences. The master's programme Management, Policy Analysis and Entrepreneurship in the Health and Life Sciences does not offer its own pre-master's programme, but accepts those students who successfully completed the "Pre-Master programma Gezondheidswetenschappen", pre-Master program Biology or pre-Master program Biomedical Sciences.
2. The pre-Master's programme comprises 30 EC and is made up of units of study depending on the specialisation chosen by the student.
3. Proof of a successfully completed pre-Master's programme serves as proof of admission to the Master's programme specified within it in the subsequent academic year.

Article 3.3 Limited programme capacity

Not applicable

Article 3.4 Final deadline for registration

A candidate must submit a request to be admitted to the programme through Studielink before the dates that are determined in the Application and Registration Regulation (at http://www.vu.nl/en/programmes/practical/policies/index.asp). Under exceptional circumstances, the Examinations Board may consider a request submitted after this closing date.

Article 3.5 English language requirement for English-language Master's programmes

1. The proficiency requirement in English as the language of instruction for national and international students can be met by the successful completion of one of the following examinations or an equivalent, before commencement of the programme:
   - IELTS: 6.5
   - TOEFL paper based test: 580
   - TOEFL internet based test: 92-93
   - Cambridge Advanced English: A, B or C.
2. Exemption is granted from the examination in English referred to in the first paragraph to students who, before the start of the programme:
   - meet the requirements of the VU test in English language proficiency TOEFL ITP, with at least the scores specified in paragraph 1, or
   - have previous education in secondary or tertiary education in an English-speaking country as listed on the VU website, or
   - have an English-language 'international baccalaureate' diploma

Article 3.6 General program

1. Subject to certain conditions, the student has the option of compiling a curriculum of his/her own choice which deviates from the curricula prescribed by the programme.
2. The concrete details of such a curriculum must be approved beforehand by the most appropriate Examinations Board.
3. The general program is put together by the student and must at least have the size, breadth and depth of a regular Master's programme.

4. Curriculum structure

Article 4.1 Composition of programme

1. The programme consists of the following components:
   a. compulsory units of study
   b. practical exercise
   c. electives

Article 4.2 Compulsory units of study

The compulsory units of study are:

Year 1

Name of course component	Course code	Number of credits	Period or semester	Teaching method	Type of test	Level
Scientific Writing in English	AM_1160	3		Study group and self-study	Assignments	400
Ethics in the Health and Life Sciences	AM_470707	3	3	Lectures, workgroups, group assignment with presentation	Written exam, presentation, assignment	400
Research Methods for Analysing Complex Problems	AM_1182	6	1	Lectures, training workshops, self-study	Written exam and assignment	400
Analysis of Governmental Policy	AM_470571	6	1	Lectures, Training; Project assignment	Written exam and assignment	500
Communication, Organization and Management	AM_470572	6	2	Lectures/working groups/assignment	Written exam and assignment	500
Science course *	various	6	various			Minimum 500

*The Science course deepens the bachelor background. It is recommended to select a Science course in line with the bachelor background and related to the field of specialisation. The course can be conducted in either year one or two and can be chosen from various science master programs. From the MPA program, the courses Containment Strategies for Infectious Diseases in Global Context (470585,_6 EC), Management of Innovative Technologies in Community Based Health Care (AM_1081, 6 EC) or the combination of Clinical Development and Clinical trials (AM_1180, 3 EC) and Epidemiology (AM_1179, 3 EC) can be included as Science course.

Year 2

Name of course component	Course code	Number of credits	Period or semester	Teaching method	Type of test	Level
Managing Science and Technology in Society	AM_470586	6	1	Lectures/working groups/assignment	Written exam and assignments	600

Article 4.3 Practical exercise

4.3.1 Specialisation Communication in the Health and Life Sciences

Internship I MPA Specialisation Communication	AM_1126	27	4-6	Self-study, intervision, supervision	Report and presentation	500
Internship II MPA Specialisation Communication	AM_ 1162 or AM_1163	30	4-6	Self-study, intervision, supervision	Report and presentation	600

Thesis MPA Specialisation Communication	AM_1129	12	1-6	Self-study, intervision, supervision	Report and presentation	600

4.3.2 Specialisation Health and Life Science-Based Management and Entrepreneurship

Internship I MPA Specialisation Management and Entrepreneurship	AM_1120	27	4-6	Self-study, intervision, supervision	Report and presentation	500
Internship II MPA Specialisation Management and Entrepreneurship	AM_471119	30	4-6	Self-study, intervision, supervision	Report and presentation	600
Thesis MPA Specialisation Management and Entrepreneurship	AM_1130	12	1-6	Self-study, intervision, supervision	Report and presentation	600

4.3.3 Specialisation Health and Life Science-Based Policy

Internship I MPA Specialisation Policy	AM_1121	27	4-6	Self-study, intervision, supervision	Report and presentation	500
Internship II MPA Specialisation Policy	AM_471123	30	4-6	Self-study, intervision, supervision	Report and presentation	600
Thesis MPA Specialisation Policy	AM_1128	12	1-6	Self-study, intervision, supervision	Report and presentation	600

4.3.4 Specialisation International Public Health

Internship I MPA Specialisation International Public Health	AM_1119	27	4-6	Self-study, intervision, supervision	Report and presentation	500
Internship II MPA Specialisation International Public Health	AM_471121	30	4-6	Self-study, intervision, supervision	Report and presentation	600
Thesis MPA Specialisation International Public Health	AM_1127	12	1-6	Self-study, intervision, supervision	Report and presentation	600

4.3.5 No specialisation

Internship I MPA	AM_1118	27	4-6	Self-study, intervision, supervision	Report and presentation	500
Internship II MPA	AM_471117	30	4-6	Self-study, intervision, supervision	Report and presentation	600
Thesis MPA	AM_1122	12	1-6	Self-study, intervision, supervision	Report and presentation	600

Note Literature thesis: students who started their programme in 2012-2013 or 2013-2014 can also opt to conduct a literature thesis of 9 EC (instead of 12 EC).
Note: Students need to complete one internship and a literature thesis in their specialisation.

Article 4.4 Electives

The MPA programme offers the following specialisations:

- Communication in the Health and Life Sciences
- Health and Life Science-Based Management and Entrepreneurship
- Health and Life Science-Based Policy
- International Public Health

Each specialisation has its own compulsory courses and choice of elective courses. First the options per specialisation are listed, after that the full list of elective courses is provided.

4.4.1 Specialisation Communication in the Health and Life Sciences

In addition to the compulsory elements listed under 4.2 and 4.3, this specialisation requires the following:

Compulsory courses		
code	**name**	**EC**
AM_470587	Science and Communication	6
	subtotal	**6 EC**
Compulsory courses: at least 6 EC to be obtained		
AM_1052	Innovation, Behavior and Economy	3
AM_1181	Management of Innovative Technologies in Community Based Health Care	6
AM_470590	Science Museology	6
AM_1002	Science in Dialogue	6
AM_471014	Science Journalism	6

4.4.2 Specialisation Health and Life Science-Based Management and Entrepreneurship

In addition to the compulsory elements listed under 4.2 and 4.3, this specialisation requires the following:

Compulsory courses		
code	**name**	**EC**
AM_470584	Business Management in Health and Life Sciences	6
	subtotal	**6 EC**
Compulsory courses: at least 6 EC to be obtained		
AM_1180	Clinical Development and Clinical Trials	3
AM_1179	Epidemiology	3
AM_470575	Entrepreneurship in Health and Life Sciences	6
AM_1052	Innovation, Behavior and Economy	3
AM_1002	Science in Dialogue	6
AM_470583	Management of Corporate Social Responsibility	6
AM_1181	Management of Innovative Technologies in Community Based Health Care	6

4.4.3 Specialisation Health and Life Science-Based Policy

In addition to the compulsory elements listed under 4.2 and 4.3, this specialisation requires the following:

Compulsory courses		
code	**name**	**EC**
AM_470589	Policy, Politics and Participation	6
Compulsory courses: at least 6 EC to be obtained		
AM_1052	Innovation, Behavior and Economy	3
AM_470820	International Comparative Analysis of Health Care Systems	6
AM_1002	Science in Dialogue	6
AM_1181	Management of Innovative Technologies in Community Based Health Care	6

4.4.4 Specialisation International Public Health

In addition to the compulsory elements listed under 4.2 and 4.3, this specialisation requires the following:

Compulsory courses: at least 12 EC to be obtained (of which at least 6 EC from the first three)		
code	**name**	**EC**
AM_470585	Containment Strategies for Infectious Diseases in Global Context	6
AM_470818	Health Globalisation and Human Rights	6
AM_470588	Disability and Development	6
	subtotal	**18 EC**
AM_1180	Clinical Development and Clinical Trials	3
AM_1179	Epidemiology	3
AM_470820	International Comparative Analysis of Health Care Systems	6
AM_1052	Innovation, Behavior and Economy	3

The student can take the following electives, dependent on the chosen specialisation.

Name of course component	Course code	Number of credits	Period or semester	Teaching method	Type of test	Level
Business Management in Health and Life Sciences	AM_470584	6	2	Lectures, Project assignment, self-study	Written exam and assignment	500
Clinical Development and Clinical Trials	AM_1180	3	3	Lecture, Computer lab, Study Group, self-study	Written exam	500
Containment Strategies for Infectious Diseases in Global Context	AM_470127	6	1	Lectures, group project, essay, self-study	Individual exam and an essay	500
Disability and Development	AM_470588	6	2	Lecture, Study group, self-study	Assignment and examination	500
Entrepreneurship in the Health and Life Sciences	AM_470575	6	2	Lectures and personal meetings, self-study	Assignment and exam	500
Epidemiology	AM_1179	3	3	Lectures, Project assignment, Self-study	Assignment and exam	500
Health, Globalization and Human rights	AM_470818	6	2	Lectures, workgroups, group project, self-study	Group project, simulation, exam	500
International Comparative Analysis of Health care systems	AM_470820	6	3	Lectures, assignments, self-study	2 Assignments	500

Innovation, Behavior and Economy	AM_1052	3	3	Lectures, workshops, field work, assignment, self-study	Written exam and assessment project	500
Management of Corporate Social Responsibility	AM_470583	6	2	Lectures, self-study, response lectures and case study.	Essay Attitude and skills assessment Case study	500
Management of Innovative Technologies in Community Based Health Care	AM_1181	6	1	Lectures, workgroups, assignments and self-study	Assignment and examination	500
Policy, Politics and Participation	AM_470589	6	2	Lectures, training workshops, project assignment, self-study	Individual evaluation based on personal performance and assessment of group assignment	500
Science and communication	AM_470587	6	1	Lectures and seminars, self-study	individual essay group assignment and written examination	500
Science Museology	AM_470590	6	3	Lectures, workgroups, assignments and self-study	Assignments presentations written exam	500
Science in Dialogue	AM_1002	6	2	Guest lectures, Interactive lectures, Training workshops, Individual and Group Assignments, Personal Development Plan, self-study	Individual Assignments, Small Group Assignments, Personal Reflection Log	500
Science Journalism	AM_471014	6	2	Lectures, seminars, self-study	Individual Assignments, Small Group Assignments, Personal Reflection Log	500

If the student wishes to take a different course than the units of study listed, advance permission must be obtained in writing from the Examinations Board.

Article 4.5 Sequence of examinations

Students may participate in examinations [and/or practical exercises] for the units below only if they have passed the examination or examinations for the units mentioned:
Students need to have passed the exams and the practical exercises of the three compulsory courses of year 1 before they can start their internships.
A course can only be passed when the scores on all parts of the examination are sufficient (6.0 or higher)

Article 4.6 Participation in practical exercise and tutorials

1. In the case of a compulsory practical training, the student must attend at least 100 % of the practical sessions. Should the student attend less than 100 %, he/she must repeat the practical training, or the Examinations Board may have one or more supplementary assignments issued.
2. In the case of compulsory tutorials with assignments, the student must attend at least 100 % of the tutorials. Should the student attend less than 100 %, he/she must repeat the study group, or the Examinations Board may have one or more supplementary assignments issued.
3. In exceptional circumstances, the Examinations Board may, at the request of the student, permit an exemption from this requirement if, in the opinion of the Board, the assessment of the intended skills is also possible with a lesser percentage of participation, with or without the imposition of supplementary requirements.

Article 4.7 Maximum exemption

There is a maximum to the number of in total 40 EC of the MPA curriculum that can be accumulated through granted exemptions (each student should at least obtain 80 EC within the master programme MPA):

- either a maximum 40 EC can be accumulated from a *completed* master programme with a duration of two years (120 EC)
- or a maximum of 20 EC can be accumulated from a *completed* master programme with a duration of one year (60 EC)

Article 4.8 Validity period for results

As laid down in article 4.8 of OER part A.

Article 4.9 Degree

Students who have successfully completed their Master's final examination are awarded a Master of Science (MSc) degree. The degree awarded is stated on the diploma.

5. Transitional and final provisions

Article 5.1 Amendments and periodic review

1. Any amendment to the Teaching and Examination Regulations will be adopted by the faculty board after taking advice from the relevant Board of Studies. A copy of the advice will be sent to the authorised representative advisory body.
2. An amendment to the Teaching and Examination Regulations requires the approval of the authorised representative advisory body if it concerns components not related to the subjects of Section 7.13, paragraph 2 sub a to g and v, as well as paragraph 4 of the WHW and the requirements for admission to the Master's programme.
3. An amendment to the Teaching and Examination Regulations can only pertain to an academic year that is already in progress if this does not demonstrably damage the interests of students.

Article 5.2 Transitional provisions

Notwithstanding the current Teaching and Examination Regulations, the following transitional provisions apply for students who started the programme under a previous set of Teaching and Examination Regulations:

1. Compulsory components that were removed from the curriculum

The compulsory components below have been replaced in academic year 2015-2016

New component	Former component
*A*M_1182 Research methods for analyzing complex problems (6 EC)	AM_*470582* _ Qualitative and qualitative research methods (6 EC)

From 1 September 2015 students obtain the new course, research project or thesis, unless they passed the former

3. Elective components that have been replaced

The elective components below have been replaced in academic year 2014-2015

a. *Communication in Health and Life Sciences, Health and Life Science-based Management and Entrepreneurship*

New component	Former component
AM_1180 Clinical Development and Clinical trials (3 EC)	AM_470585 Clinical Development and Clinical trials (6 EC)

4. Elective components that have been removed from the curriculum

The courses below are no longer available in the program but are still elective components for students who started their program before academic year 2015-2016 and have passed the courses' examinations.

Courses ended after academic year 2014-2015:

a. *Health and Life Science-based Management and Entrepreneurship*
- AM_470585 Clinical Development and Clinical trials (6EC)

a. International Public Health
- AM_470585 Clinical Development and Clinical trials (6EC)

Courses ended in academic year 2013-2014:
a. *International Public Health*
- AM_470583 Management of Corporal Social Responsibility (6 EC)

5. Total of 120 EC

The final examination program should always total at least 120 EC.

Article 5.3 Publication

1. The faculty board will ensure the appropriate publication of these Regulations and any amendments to them.
2. The Teaching and Examination Regulations will be posted on the faculty website and deemed to be included in the course catalogue.

Article 5.4 Effective date

These Regulations enter into force with effect from 1 September 2015

Advice from Board of Studies, MPA educational board, on 23-4-2015

Approved by authorised representative advisory body on 15 July 2015

Adopted by the faculty board on 21 August 2015.