Teaching and Examination Regulations (OER)

Master program Cardiovascular Research

Vrije Universiteit Amsterdam
VUmc School of Medical Sciences

Academic Year 2019-2020

A. Faculty section

B1. program specific section - general provisions
B2. program specific section - content of program

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<th>Opdrachtgever:</th>
<th>Raad van Bestuur VUmc</th>
</tr>
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<td>Datum vaststelling:</td>
<td>19 maart 2019</td>
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<tr>
<td>Vastgesteld door:</td>
<td>Mw. Prof. dr. C. Boer Vice-decaan onderwijs en Opleiden VUmc a.i.</td>
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Part A: Faculty section

1. General provisions

Article 1.1 Applicability of the Regulations
1. These Regulations apply to anyone enrolled for the program, irrespective of the academic year in which the student was first enrolled for the program.
2. These regulations enter into force with effect on September 1\textsuperscript{st} 2019.
3. An amendment to the Teaching and Examination Regulations is only permitted to concern an academic year already in progress if this does not demonstrably damage the interests of students.
4. The Dean is responsible for the publication of these Teaching and Examination Regulations (www.med.vu.nl) and for publication in the digital study guide of the VU. For the Teaching and Examination Regulations for the Master of Epidemiology, there will be referred to the study guide on www.epidm.nl.

Article 1.2 Definitions
The following definitions are used in these Regulations:

a. EC (European Credit): an EC credit with a workload of 28 hours of study;
b. examination: the final examination of the Master's program;
c. semester: the first (September - January) or second half (February - August) of an academic year;
d. joint degree: a degree awarded by an institution together with one or more institutions in the Netherlands or abroad, after the student has completed a study program (a degree program, a major or a specific curriculum within a degree program) for which the collaborating institutions are jointly responsible;
e. educational component: a unit of study of the program within the meaning of the WHW;
f. period: a part of a semester;
g. practical exercise: the participation in a practical training or other educational learning activity, aimed at acquiring certain (academic) skills. Examples of practical exercises are:
- researching and writing a thesis or dissertation
- carrying out a research assignment
- taking part in fieldwork or an excursion
- taking part in another educational learning activity aimed at acquiring specific skills, or
- participating in and completing a work placement;
h. program: the totality and cohesion of the course components, teaching activities/methods, contact hours, testing and examination methods and recommended literature;
i. thesis: a component comprising research into the literature and/or contributing to scientific research, always resulting in a written report;
j. SAP/SLcMVU: the Student Information System;
k. study guide: the guide for the study program that provides further details of the provisions and other information specific to that program. The study guide (or course catalogue) is available electronically at: https://www.vu.nl/en/study-guide/;
l. workload: the workload of the unit of study to which an interim examination applies, expressed in terms of credits = EC credits (ECTS = European Credit and Transfer Accumulation System). The workload for 1 year (1,680 hours) is 60 EC credits;

Adopted on behalf of the Dean by Ms. Prof.dr. C Boer, Vice-dean Education and Research a.i. on March 19, 2019
m. academic year: the period beginning on 1 September and ending on 31 August of the following calendar year;

n. interim examination: an assessment of the student’s knowledge, understanding and skills relating to a course component. The assessment is expressed in terms of a final mark. An interim examination may consist of one or more partial examinations. A retake always covers the same material as the original interim examination;

o. University: Vrije Universiteit Amsterdam;

p. CANVAS: a student information system;

q. WHW: the Dutch Higher Education and Research Act (Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek);

r. OLC: program committee;

s. FGV: Faculty joint assembly - assembly of the faculty student council and faculty staff council;

t. CvB: the Executive Board of Vrije Universiteit Amsterdam.

The other terms have the meanings ascribed to them by the WHW.

2. Study program structure

**Article 2.1 Structure of academic year and educational components**

1. The study program will be offered in a year divided into two semesters.

2. Every semester consists of three consecutive periods of eight, eight and four weeks
   a. For the postgraduate program Epidemiology and the Master program Medicine, Article 1 and 2 do not apply. The schedule of the academic year is described in Section B.

3. An educational component comprises 6 EC or a multiple thereof.

4. By way of exception to paragraph 3, Section B may stipulate that a unit of study comprises 3 EC or a multiple thereof. The Faculty Board requests permission from the Executive Board.
   a. For the following (parts of) programs Article 3.2.3 and 3.2.4 do not apply:
      • postgraduate Master program Epidemiology
      • third year of the Master degree program Medicine curriculum 2015

3. Assessment and Examination

**Article 3.1 Signing up for education and interim examinations**

1. Every student must sign up to participate in the educational components of the program, the examinations and retakes. The procedure for signing up is described in an annex to the Student Charter.
   a. For the Master Medicine different rules apply for the signing up procedure (see Canvas).
   b. For the Master Epidemiology different rules apply for the signing up procedure (see www.epidm.nl).

2. Signing up may only take place in the designated periods.

**Article 3.2 Type of examination**

1. At the student’s request, the Examinations Board may permit a different form of interim examination than that stipulated in the course catalogue. If applicable, more detailed regulations on this are included in the Rules and Guidelines for the Examinations Board.

2. If an educational component is no longer offered in the academic year following its termination, at least one opportunity will be provided to sit the interim examination(s) or parts thereof and a transitional arrangement will be included in the program-specific section for the subsequent period.

Adopted on behalf of the Dean by Ms. Prof.dr. C Boer, Vice-dean Education and Research a.i. on March 19, 2019
Article 3.3 Oral interim examinations
1. An oral assessment is public unless the Examinations Board or examiner determines otherwise in an exceptional case.

Article 3.4 Determining and announcing results
1. The examiner determines the result (= mark) of a written examination as soon as possible, but at the latest within ten working days. Contrary to the provisions of the first sentence, the marking deadline for either essays, papers or exams consisting of more than 50% of open-ended questions is no longer than fifteen working days, while for theses and final assignments the marking deadline is no longer than twenty working days after submission of the thesis/assignment. The examiner will then immediately ensure that the marks are registered and also ensures that the student is immediately notified of the mark, taking due account of the applicable confidentiality standards.
   a. For the Master program Medicine an exception is made on Article 4.4.1 for the National Progression Test (Voortgangstoets, VGT) the results will be determined after 25 working days.
2. The examiner determines the result (i.e. mark) of an oral examination as soon as possible after the examination has finished and informs the student accordingly. The third clause of the first paragraph applies.
3. In the case of alternative forms of oral or written examinations, the Examination Board determines in advance how and by what deadline the student will be informed of the results.

Article 3.5 Examination opportunities
1. Per academic year, two opportunities to take examinations per educational component will be offered.
2. The options for retaking practical components, work placements and theses are detailed in the relevant work placement manual, teaching regulations or graduation regulations.
3. The most recent mark will apply in the event of a retake. A retake is allowed for both passed and failed units of study.
4. The retake for a (partial) interim examination must not take place within ten working days of the announcement of the result of the (partial) examination being retaken.
5. The Examination Board may allow a student an extra opportunity to sit an examination if that student is lacking only those credits to qualify for his degree. This is conditional to the student’s having failed the examination during a previous attempt. Furthermore, there may be no more regular opportunities for retaking the examination in the current academic year. If necessary, the method of examination may deviate from the provisions in the study guide. This provision excludes the practical assignments (internships, literature study, theses and professional behavior exams). Requests for an additional examination opportunity must be submitted to the Examination Board no later than the 1st of August.
6. Retaking practical components, work placements and theses is not allowed in case a grade > 5.5 was obtained.

Article 3.6 Marks
1. Marks are given on a scale from 1 to 10, with a maximum of one decimal after the comma.
2. Final marks are given with 0 or 5 after the comma.
3. Final marks between 5 and 6 will be rounded off to whole marks: up to 5.5 rounded down; from 5.5 rounded up. To pass a course, a 6 or higher is required.
4. The Examination Board can allow to use symbols rather than numbers, for example; examinations can also be assessed with failed/passed (F/P) or insufficient/sufficient/good (I/S/G). A program component is passed with a passed, sufficient or good.
Article 3.7 Exemption
1. At the written request of the student, the Examination Board may exempt the student from taking one or more examination components, if the student:
   a. has passed a course component of a university or higher professional education program that is equivalent in terms of content and level;
   b. has demonstrated through his/her work and/or professional experience that he/she has sufficient knowledge and skills with regard to the relevant course component.
2. One or more educational components with examinations are excluded from this option of exemption, see part B

Article 3.8 Validity period for results
1. The validity period of interim examinations passed and exemption from interim examinations is unlimited, unless otherwise specified in Section B.
2. The validity period of a partial examination is limited to the academic year in which it was sat or until the end of the unit of study concerned, as stipulated for the relevant unit of study in Section B.

Article 3.9 Right of inspection and post-examination discussion
1. For twenty working days after the announcement of the results of a written interim examination, the student can, on request, inspect his/her assessed work, the questions and assignments set in it, as well as the standards applied for marking. The place and time referred to in the previous clause will be announced at the time of the interim examination or on Canvas.
2. If a collective post-examination discussion has been organized, individual post-examination discussions will be held only if the student has attended the collective discussion or if he/she was unable to attend the collective discussion through no fault of his/her own.
3. Students who meet the requirements stipulated in paragraph 2 can submit a request for an individual post-examination discussion to the relevant examiner. The discussion shall take place at a time and location to be determined by the examiner.

4. Academic student counselling and study progress

Article 4.1 Administration of study progress and academic student counselling
1. The dean is responsible for the correct registration of the students’ study results. After the assessment of an educational component has been registered, every student has the right to inspect the result for that component and also has a list of the results achieved at his/her disposal in VUnet.
   a. For the postgraduate Master degree Epidemiology the registration takes place in CurSys.
2. Enrolled students are eligible for academic student counselling. Academic student counselling is in any case provided by:
   a. The Student General Counselling Service
   b. Student psychologists
   c. Faculty academic advisors

Article 4.2 Adaptations for students with a disability
1. A student with a disability can, at the moment of submission to VUnet, or at a later instance, submit a request to qualify for special adaptations with regard to teaching, practical training and interim examinations. These adaptations will accommodate the student’s individual disability as much as possible, but may not alter the quality or degree of difficulty of a unit of study or an examination. In all cases, the student must fulfil the exit qualifications for the study program.

Adopted on behalf of the Dean by Ms. Prof.dr. C Boer, Vice-dean Education and Research a.i. on March 19, 2019
2. The request referred to in the first paragraph must be accompanied by a statement from a doctor or psychologist. If possible, an estimate should be given of the potential impact on the student’s study progress. In case of a chronic disability a single (one time) request suffices.

3. Students who have been diagnosed with dyslexia must provide a statement from a BIG, NIP or NVO registered professional.

4. The program director or the responsible person on behalf of the dean, decides on the adaptations concerning the teaching facilities and logistics. The Examinations Board will rule on requests for adaptations with regard to examinations.

5. In the event of a positive decision in response to a request as referred to in paragraph 1, the student will make an appointment with the study adviser to discuss the details of the provisions.

6. A request for adaptations will be refused if it would place a disproportionate burden on the organization or the resources of the faculty or university were it upheld.

7. If the disability justifies an extension of the interim examination time, the Examinations Board will issue a statement testifying to this entitlement to an extension. If a disability justifies other measures to be taken, the academic adviser can take the necessary measures.

8. The decision as referred to in paragraph 5 may specify a limited validity of the special adaptations.

5. Hardship clause

In instances not regulated by the Teaching and Examination Regulations or in the event of demonstrable extreme unreasonableness and unfairness, the dean responsible for the degree program will decide, unless the matter concerned is the responsibility of the Examination Board.
Part B1: Program specific section - General Provisions

6. General program information and characteristics

Article 6.1 Study program information
1. The program Cardiovascular Research (CROHO 66586) is offered on a full-time basis.
2. The full-time program has a nominal duration of study of 2 years.
3. The language of instruction is English

Article 6.2 Teaching formats used and modes of assessment
1. The program uses the teaching formats as described in the study guide.
2. The program uses the models of assessment as described in the study guide and in part B2 of this OER.

Article 6.3 Academic student counselling
1. The program offers the following counselling in addition to the student counselling mentioned in Section A
   a. Program coordinator

Article 6.4 Indecent behavior during the program
1. Master Cardiovascular Research students should, in the context of their program, behave like a good Master Cardiovascular Research student befits. This applies to the program as a whole and in particular in cases where a student, in the context of his/her program, or as student Cardiovascular Research has contact with people, who are present and/or employed at the VU, VUMc or the healthcare institution wherein he/she attends part of the program. Indecent behavior in this context includes: discriminating, insulting, offensive or otherwise negative remarks, impolite expressions, violence, no or too little respect, decency or hygiene, violation of confidentiality, acting deceitfully, forgery of documents, fraud, deliberate deception among other things, as well as unacceptable behavior including sexual intimidation, and acting towards a third person against his/her wish. Additionally, one is referred to the Student Charter 2019-2020 of the VU.
2. In case, at any time during the program, a teacher, fellow-student or someone not directly involved in the program states an action of indecent behavior by a student, the teacher, fellow-student or person not-directly involved in the program, after having informed the student in question, reports in writing and justified to the dean. A notification of an incident of order will be made. Subsequently, the notification will be handled in accordance with the Procedure notification of an incident of order (on Blackboard). Additionally, one is referred to the Student Charter 2019-2020 of the VU.

7. Further admission and requirements

Article 7.1 Intake date
1. The program starts on the 1st of September.

Article 7.2 Admission requirements
1. The admission requirements will be published on the websites of the master program from the 1st of October onwards before the start of the next academic year. Admission to the Master's program is possible for an applicant who has obtained a Bachelor's degree obtained at an institution of academic higher education, which meets the following requirements:
   a. Well-developed academic skills including writing and presenting skills, the ability to evaluate and apply knowledge, and the ability to engage in critical thinking.
   b. A clear motivation and talent for participation in the program.

Adopted on behalf of the Dean by Ms. Prof.dr. C Boer, Vice-dean Education and Research a.i. on March 19, 2019
c. Basic knowledge of Heart Anatomy, Physiology and Pathology.
d. Preferably a minimum grade-point average of 7.5 (or international equivalent, e.g. a B+, or a GPA of 3.4); and a minimum grade of 8 (or international equivalent, e.g. an A, or a GPA of 4.0), for the Bachelor’s thesis. If you have lower grades, you are also welcome to apply for the program.
e. Passes both parts of the admission assessment test of the program. The assessment test consists of two parts which will be in the morning (knowledge) and afternoon (academic understanding).

2. The Admissions Board will investigate whether the applicant meets the admission requirements.
3. In addition to the requirements referred to in the first paragraph, the Admissions Board can also assess requests for admission in terms of (at least two of) the following criteria:
   a. talent and motivation;
   b. level of relevant knowledge and understanding;
   c. proficiency in methods and techniques;
   d. academic attitude and critical thinking;
   e. proficiency of the language(s) of instruction.

Article 7.3 English language requirements
1. In deviation from the language proficiency requirements as stated in the Application and registration regulation (RAI) an international applicant should demonstrate that he or she has sufficient level of proficiency in English by meeting at least one of the following standards, no more than two (2) years before the start of the program at the VU:
   a. (academic) IELTS (>6.5)
   b. TOEFL paper-based test and TOEFL-ITP (> 580)
   c. TOEFL internet-based test (> 92)
   d. Cambridge Certificate of Proficiency in English (CPE) or the Cambridge Certificate of Advanced English (CEA) Score C
2. Applicants who:
   a. completed an English-taught secondary or higher education degree in Canada, the United States, the United Kingdom, Ireland, New Zealand or Australia or
   b. have earned a Bachelor’s or Master’s degree in an English-taught program accredited by NVAO in the Netherlands, or
   c. have earned a Bachelor’s or Master’s degree in an accredited English-taught program in another member state of the European Union
   are exempted from the requirements referred to in paragraph 1.
3. Dutch degree holders must have passed the English courses in their previous education. In case the admission board decides that the level of English proficiency is not sufficient based on the previous education and/or admission assessment test, students will be asked to provide a VU-test English-language proficiency: TOEFL-ITP certificate (> 580).

Article 7.4 Pre-Master’s program
1. The master program Cardiovascular Research has no pre-Master’s program.

8. Interim examinations and results

Article 8.1 Sequence of examinations
1. Students may participate in interim examinations [or practical exercises] of the components below only if they have passed the interim examination or examinations for the components mentioned hereinafter:
   a. minor Internship after passing 18 EC of compulsory courses;
   b. major Internship after passing minor Internship;
   c. literature Study after passing minor Internship.
2. When the master program would like to give a student the opportunity to start earlier with a minor internship, major internship or literature thesis due to certain circumstances, the Examination Board ECRO (Epidemiology, Cardiovascular Research and Oncology) is allowed to make an exception for 8.1 a, b and c.

Adopted on behalf of the Dean by Ms. Prof.dr. C Boer, Vice-dean Education and Research a.i. on March 19, 2019
Article 8.2 Validity period for results

1. The validity period of the interim examinations and exemptions from interim examinations below, is limited as follows:
   a. The period of validity of interim examinations is 3 years, as of the subsequent academic year in which the interim examination has been taken.
   b. The period of validity for exemptions is 3 years, as from the year the interim examination is granted.
   c. The examination board can extend the validity of an examination or exemption when the student files a motivated request. When the standardized knowledge of the examination is demonstrably outdated, or if the qualifying skills are demonstrably outdated, the Examination Board can impose a supplementary examination, impose an alternative examination or refuse the validity period.
   d. For students registered before 2016-2017, extension of the validity period of results obtained for compulsory courses M_CPATH09, M_CCLINBIO09, M_CVASCFU09, M_CREMODE09 is not possible.

Part B2: Program specific section - content of program

9. Program objectives, specializations and exit qualifications

Article 9.1 Workload program

1. The program has a workload of 120 EC.
Article 9.2 Specializations
1. The program has no specializations

Article 9.3 Program objectives
1. The program aims:
   a. to prepare the student to practice as an independent professional within the field of Cardiovascular Research.
   b. to teach the student specialized knowledge, skills and understanding in the field of Cardiovascular Research and to be a suitable candidate for a subsequent course of study leading to a career in research.
   c. to prepare the student for academic work in the field of Cardiovascular Research.
2. The program’s objectives are as follows:
   a. Awareness of the ethical aspects of medical research;
   b. Independent academic thought processes and performance;
   c. Communicating at an academic level in the student’s own language and English;
   d. Applying specialist academic knowledge in a wider and/or philosophical and social context.

The degree program focuses on the student’s personal development, promotes his/her awareness of social responsibility in research and develops students’ skills of expression in the English language.

Article 9.4 Program competences
1. In all events, a graduate of the degree program will have the attainment level as described in Table 1.

Table 1: Roles of the novice Cardiovascular Research researcher.

<table>
<thead>
<tr>
<th>Role 1 Scholar</th>
</tr>
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<tbody>
<tr>
<td>The novice researcher keeps his/her own knowledge and skills up-to-date and transfers scientific knowledge to others. He/she works independently in a professional manner in the process of drafting, implementing and evaluating areas of research. The novice researcher steers the own professional development.</td>
</tr>
<tr>
<td>1.1 The novice researcher keeps his/her own knowledge up-to-date.</td>
</tr>
<tr>
<td>1.2 The novice researcher performs research independently.</td>
</tr>
<tr>
<td>1.3 The novice researcher efficiently familiarizes him- or herself with a new area of research.</td>
</tr>
<tr>
<td>1.4 The novice researcher exhibits adequate professional behavior.</td>
</tr>
<tr>
<td>1.5 The novice researcher is able to steer his/her own professional development.</td>
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<tr>
<th>Role 2 - Collaborator</th>
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<tbody>
<tr>
<td>The novice researcher participates effectively and appropriately in a multidisciplinary research team and in the inter-collegial peer review processes. He/she is able to build a network of contacts and to use them adequately.</td>
</tr>
<tr>
<td>2.1 The novice researcher participates effectively in a multidisciplinary research team.</td>
</tr>
<tr>
<td>2.2 The novice researcher makes adequate use of networks in the research field.</td>
</tr>
<tr>
<td>2.3 The novice researcher participates in the inter-collegial peer review process.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Role 3 - Communicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>The novice researcher gives oral and written reports of the research to colleagues in their own discipline and to other stakeholders. The novice researcher participates in scientific discussions and debates and takes a stance in such discussions and debates.</td>
</tr>
<tr>
<td>3.1 The novice researcher provides verbal and written reports of the research to colleagues in his/her own discipline and to other stakeholders.</td>
</tr>
<tr>
<td>3.2 The novice researcher participates in scientific discussions on (Cardiovascular) research.</td>
</tr>
<tr>
<td>3.3 The novice researcher participates in the public debate on (Cardiovascular) research.</td>
</tr>
</tbody>
</table>

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<tr>
<th>Role 4 - Manager</th>
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</thead>
<tbody>
<tr>
<td>Adopted on behalf of the Dean by Ms. Prof.dr. C Boer, Vice-dean Education and Research a.i. on March 19, 2019</td>
</tr>
</tbody>
</table>
The novice researcher organizes his/her own research adequately within the applicable quality and financial frameworks, in order to achieve the set goals.

4.1 The novice researcher can organize and manage scientific research.

4.2 The novice researcher understands the financial aspects of research.

4.3 The novice researcher contributes to the quality improvement of research and of the research institute.

10. Curriculum Structure

Article 10.1 Composition of the program
1. The program consists of the following components as shown in Figure 1:
   a. Compulsory units of study (33 EC)
   b. Optional units of study (12 EC)
   c. Minor / major internship (30 and 36 EC)
   d. Literature study (9EC)

![Figure 1: Composition of the master program.](image)

Article 10.2 Compulsory units of the program
1. The compulsory units of the program are:

<table>
<thead>
<tr>
<th>Title</th>
<th>Code</th>
<th>Number of EC</th>
<th>Period</th>
<th>Teaching method</th>
<th>Test type</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>Year 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart and circulation: basic principles</td>
<td>M_CHCBP16</td>
<td>6</td>
<td>Period 1</td>
<td>Lectures, workgroups, self-study</td>
<td>Written examination, assignments</td>
<td>400</td>
</tr>
<tr>
<td>Cardiac disease: Mechanisms, diagnosis and treatment</td>
<td>M_CCDMDT16</td>
<td>6</td>
<td>Period 1</td>
<td>Lectures, workgroups, self-study</td>
<td>Written examination, assignments</td>
<td>400</td>
</tr>
<tr>
<td>Diabetes and vascular disease: Mechanisms, diagnosis and treatment</td>
<td>M_CDVDMDT16</td>
<td>6</td>
<td>Period 2</td>
<td>Lectures, workgroups, self-study</td>
<td>Written examination, assignments</td>
<td>400</td>
</tr>
</tbody>
</table>

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From personalized medicine to advanced imaging

| M_CFAISC16 | 6 | Period 2 | Lectures, workgroups, self-study | Written examination, 400 |

Writing a Research Proposal

| M_FWRP18 | 3 | Period 3 | Lectures, workgroups, self-study | Written examination, assignments 500 |

Biostatistics

| M_FBIOSTAT16 | 3 | Period 3 | Lectures, workgroups, self-study | Written examination, assignments 500 |

Academic Core

| M_OACCOREA14 | 0 | Semester 1 and 2 | Lectures, workgroups, self-study | Lectures, workgroups, self-study 500 |

Minor Internship

| M_OMINORI16 | 30 | Semester 2 | Practical work, work discussion | Report, presentation, practical work 400 |

Year 2

| M_OACCOREB14 | 3 | Semester 1 | Lectures, workgroups, self-study | Assignments 500 |

Literature Study

| M_OLITSTU03 | 9 | Semester 1-2 | Work discussions | Report, presentation 500 |

Major Internship

| M_OMAJORI16 | 36 | Semester 1-2 | Practical work, work discussion | Thesis, presentation, practical work 500 |

More information about the compulsory units are described in the study guide.

**Article 10.3 Elective educational components**

1. The VUmc School of Medical Sciences offers the following electives:

<table>
<thead>
<tr>
<th>Title</th>
<th>Code</th>
<th>Number of EC</th>
<th>Period</th>
<th>Teaching method</th>
<th>Test type</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biobusiness course</td>
<td>M_OBIOBUS10</td>
<td>3</td>
<td>3-4</td>
<td>Lectures, Work groups, Self-study</td>
<td>Assignments</td>
<td>500</td>
</tr>
<tr>
<td>Life Cell Imaging</td>
<td>M_CLIFEC09</td>
<td>3</td>
<td>3-4</td>
<td>Lectures, Work groups, Self-study</td>
<td>Assignments, Exam</td>
<td>500</td>
</tr>
<tr>
<td>Proteomics in Biomedical Sciences</td>
<td>M_CPROTBIO09</td>
<td>3</td>
<td>3-4</td>
<td>Lectures, Laboratory project, Literature presentation, Self-study</td>
<td>Exam</td>
<td>500</td>
</tr>
<tr>
<td>Cardiac Development</td>
<td>M_CCARDE18</td>
<td>3</td>
<td>Academic year</td>
<td>Lectures, Work groups, Self-study Practicals</td>
<td>Exam</td>
<td>500</td>
</tr>
</tbody>
</table>

Students need to obtain advance permission from the Examination Board for optional courses in advance. Students can also apply for courses at other faculties or universities, for which they need to provide the program of the course, the level, the examination and their own study plan including results thus far. The total amount of EC for the optional courses is 12 EC.

Adopted on behalf of the Dean by Ms. Prof.dr. C Boer, Vice-dean Education and Research a.i. on March 19, 2019
Article 10.4 Practical exercise
1. Practical exercises are described in Section B2 Article 10.2 of this OER.

Article 10.5 Participation in practical exercise and tutorials
1. In the case of a practical training, the student must attend 100% of the practical sessions. Should the student attend less than 100%, he/she must repeat the practical training, or the Examination Board may have one or more supplementary assignments issued.
2. In the case of tutorials with assignments, the student must attend 100% of the tutorials. Should the student attend less than 100%, he/she must repeat the study group, or the Examination Board may have one or more supplementary assignments issued.
3. In exceptional circumstances, the Examination Board may, at the request of the student, permit an exemption (a maximum of 30 EC) from this requirement if it is evident that the intended skills have been acquired.

Article 10.6 Maximum exemption
1. A maximum of 30 EC of the curriculum can be accumulated through granted exemptions by the Examination Board. This exemption does not apply to the Major Internship (Master’s Thesis).

11. Evaluation and transitional provisions

Article 11.1 Evaluation of the education
1. The education provided in this program is evaluated in accordance with the evaluation plan which is published on CANVAS. The faculty evaluation plan offers the framework.

Article 11.2 Transitional provisions
1. Notwithstanding the current Academic and Examination Regulations, the following transitional provisions apply for students who started the program under a previous set of Academic and Examination Regulations:
   a. For students registered before the academic year 2015-2016, the course codes M_MINOR09 and M_CMAJOR09 still apply. The students can vary the number of EC assigned to the modules. For the Minor Internship the number of EC is between 21 and 27 and for the Major Internship between 36 and 42 EC. In total 63 EC for both components need to be obtained.
   b. For students registered before the academic year 2016-2017 the compulsory courses M_CPATH09, M_CCLINBIO09, M_CVASCFU09, M_CREMODE09 and M_CBIOSTA09 still apply.
   c. For students registered before 2018-2019, the course code M_FWSE09 still apply.

Advice and approval by the Program Committee, on January 8th, 2019.
Approved by the Faculty Joint Assembly, on  February 18th, 2019
Adopted by on behalf of the Dean by Ms. Prof. dr. C Boer, Vice-dean Education and Research a.i. on March 19, 2019.