

EMDM 2017-2018

General Rules

1. Scope

The EMDM, Master of Science in Disaster Medicine, is addressed to all health professionals involved in the medical disaster management and humanitarian health response at local, national and international level.

The EMDM is an interuniversity and international course. This fact is translated in

- the composition of an International Faculty of qualified professionals in disaster medicine and humanitarian health coming from European and extra-European countries, affiliated with academic and worldwide renowned institutions.
- the multinational composition of the EMDM classes. Since inception, students from over 75 countries, spread over the 5 continents, have attended the course;
- the bilateral agreements between the Organizing Universities, CRIMEDIM of the Università del Piemonte Orientale (Novara, Italy) and ReGEDiM of the Vrije Universiteit Brussel (Brussels, Belgium), and the Associate Universities and Institutions such as the Center for Disaster Medical Sciences at the University of California Irvine (Irvine, US), Hôpitaux Universitaires de Genève (Geneva, Switzerland), Katastrofmedicinskt Centrum (Linköping, Sweden), Hacettepe University (Ankara, Turkey), School of Nursing & Human Sciences at Dublin City University (Dublin, Ireland).
- the support of international organizations such as the World Health Organization (WHO), Médecins Sans Frontières (MSF) and the European Society for Emergency Medicine (EuSEM);
- the high-level academic profile of the Strategic Management Board and the Education Committee, which are responsible for the elaboration, review and evaluation of the program.
- the international network of disaster medicine professionals established in the EMDM Alumni Association.

2. Denomination of the EMDM

The EMDM, Master of Science in Disaster Medicine, is a level-two master program jointly organised by CRIMEDIM, the Research Center in Emergency and Disaster Medicine of the Università del Piemonte Orientale (UPO) and ReGEDiM, the Research Group on Emergency and Disaster Medicine of the Vrije Universiteit Brussel (VUB). The implementation of the EMDM is delegated to CRIMEDIM for the UPO and ReGEDiM for the VUB.

3. Teaching regulations

3.1 Breakdown of the academic year

The Academic year starts on November 20th 2017 and ends on the day before the start of the following academic year. The Strategic Management Board may decide to deviate from the fixed date by declaring an earlier or later start or end to the academic year.

An academic year is divided into two semesters:

The first semester (Week 1 - 26) consists of:

- 1) an online course (self-directed study under Faculty guidance) based on didactic activities integrated in an e-learning curriculum providing the students the “core” knowledge needed to participate optimally in the activities of the two-week training period;
- 2) a two-week face-to-face training period at the end of the first semester during which the students meet the Faculty and fellow students to interact in debates, practical exercises and simulations, meant for applying the integrated knowledge and for solving problems in disaster situations with which students will be faced after being graduated;
- 3) the presentation of the Master’s thesis proposal during the two-week training period to a scientific committee composed of one representative of the organizing universities (UPO and VUB), Faculty members, experts in research methodology and thesis supervisors.

The second semester (Week 27 - 52) consists of:

- 1) the continuation of the online course, a self-directed study under Faculty guidance based on didactic activities integrated in an e-learning curriculum providing the students additional knowledge, particularly in those fields they judge important for their current or future career. The needed information for acquiring this knowledge can be found in thematic libraries present on the e-learning platform or through guidance by the Faculty;
- 2) The writing of a Master’s thesis on a topic approved by the Thesis Coordinator and the Education Committee, and under the supervision of a thesis supervisor, chosen among the Faculty;
- 3) A Final online examination provided on the EMDM e-learning platform, consisting of an electronic simulation exercise and a multiple-choice questionnaire on the content of the program units.

3.2. Aims and objectives of the program

The overall objectives of the program are to provide students with:

- 1) A clear picture of the state of the art of the disaster medical management and sciences in order to train health workers to a high professional level, suitable to work at local, national and international level as clinical providers, public health practitioners, humanitarian fieldworkers or researchers for governmental, non-governmental or international organizations.
- 2) A broader spectrum of knowledge and skills in disaster medicine and disaster medical management as well as deeper insight into specific areas of application, taking into account the different disaster medical systems, the international environment in which humanitarian

health workers operate, and the interactions with different stakeholders including national authorities and governmental agencies.

- 3) An advanced understanding of innovative tools currently available in the field of disaster and humanitarian health both for training, medical management analysis and field operation purposes, and the practical skills to apply these tools during real events.
- 4) A solid foundation of research methodologies and practices applied to disaster medicine and disaster medical management currently used by leading academic institutions and international organizations in the field of disaster and humanitarian health.
- 5) An inspirational environment to highly contribute to the global development of disaster medicine as an academic discipline through promoting active collaboration between the universities and institutions involved in the study program, the students and the Alumni.

3.3. Learning outcomes

The general learning outcomes are:

- 1) The ability to contribute to the body of knowledge of disaster medicine and disaster medical management;
- 2) The ability to conduct independent research, and to report and communicate the results;
- 3) The skills of creative and flexible problem-solver and decisionmaker under crisis situations and with limited situational awareness;
- 4) The ability to work in team and in an interdisciplinary and multidisciplinary environment at national and international level;
- 5) The skills to master lifelong learning;
- 6) The skills to use information technology.

The discipline-specific learning outcomes, which are directly related to technical scientific skills and operational abilities, are:

- 1) The knowledge of the characteristics of disasters and disaster medicine, and the ability to assess the risk and the impact of disasters;
- 2) The ability to design, implement and assess health programs for different types of disasters during all the phases of the disaster management cycle;
- 3) The ability to develop, manage and evaluate psychosocial support of victims, their families and relatives, other members of the community, and emergency personnel;
- 4) The ability to manage the medical and public health needs in complex humanitarian emergencies, including the coordination with all the organizations and agencies involved;
- 5) The ability to develop, evaluate and revise legal, ethical and moral aspects of disaster medical management;
- 6) The ability to develop, deliver and evaluate disaster medicine training programs;
- 7) The ability to plan and organize research studies at national and international level.

3.4. Didactic concept

The didactic concept is based on:

- the application of a systematic, competency-based approach;
- a multidisciplinary approach;
- a collaborative approach;
- evidence-based practices;
- the application of a number of educational methods according to the subject to be taught, such as experiential learning through gaming and simulation, and train the trainer.

The educational materials are reinforced by synchronous discussion forums which are moderated and facilitated by students and Faculty, and complemented by exercises which apply course concepts and principles to disaster situations similar to those that the students will encounter in their work after completion of the programme.

The online discussions, the debates during the two-week training period and the international and multicultural character of students and Faculty promote lateral thinking.

One of the most important tenets of the EMDM program is the recognition and use of the experience of the students. They contribute to the learning process by giving feedback to one other, sharing their knowledge, voicing their opinions and feelings. These interactions help them to build competence and confidence in their abilities, as well as a greater commitment to the learning experience. This approach engenders intense involvement and allows participants to establish their credibility and earn the respect of their peers.

3.5. Didactic structure

The EMDM consists of:

1. A one-year online course (self-directed study under faculty guidance) composed of 10 units. This will allow the student:
 - to learn the core content of the program and to decide what to study in a greater detail at different levels;
 - to interact with the Faculty and facilitators for a better understanding of difficult points;
 - to collaborate with other students to learn how to deal with team-work;
2. A two-week face-to-face training period (the EMDM residential course), which aim is to drive the students to deepen and apply the knowledge acquired by distance learning and to equip them with the specific technical and nontechnical skills necessary to efficiently address and coordinate the medical preparedness and response during disasters and humanitarian emergencies.

3. The writing of a Master's thesis on a topic approved by the Education Committee and under the supervision of a thesis supervisor, chosen among the Faculty;
4. A Final online examination provided on the EMDM e-learning platform, consisting of an electronic simulation exercise and a multiple-choice questionnaire on the content of the program units.

3.6. Study program and curriculum

The EMDM is composed of 10 course units. Each course unit is coordinated by Faculty members of whom at least one is from the Organizing Universities.

All the study credits are translated into ECTS, the European Credit Transfer System adopted by the EMDM, according to the following distribution:

Course Unit	Study Time in hours				ECTS
	Lectures	Practical Training	Self-directed Study	Total	
CU1. The EMDM learning environment	8	12	55	75	3
CU2. Introduction to Disaster Medicine	8	12	55	75	3
CU3. Research in Disaster Medicine	14	14	47	75	3
CU4. General Disaster Medical Management	54	78	193	325	13
CU5. Specific Disaster Medical Management	30	8	87	125	5
CU6. Disaster Mental Health	16	10	49	75	3
CU7. Education and Training in Disaster Medicine	16	32	27	75	3
CU8. Complex Humanitarian Emergencies	16	26	58	100	4
CU9. Legal and Ethical Aspects	8	10	57	75	3
CU10. Master's Thesis			500	500	20
Total	170	202	1128	1500	60

Annex 1 provides a detailed overview of the curriculum.

3.7. Teaching and learning tools

3.7.1. Housing facilities

If needed, the Organizing Universities will provide the appropriate facilities to organise the EMDM. Currently, no housing facilities are needed for the organization of the EMDM program due to the e-learning format.

3.7.2. E-learning platform

The e-learning platform is based on the Moodle software for creating a virtual learning environment:

- 1) delivers the educational materials (lectures and tests/exercises) for the students according to a standardized model:
 - aim and learning objectives/outcomes;
 - pre-test (optional);
 - core content (key concepts and knowledge). It will be assessed in a post-test and in the final examination;
 - reading materials divided in three groups: “must read”, “nice to read”, and “only for information/documentation”;
 - self-assessment test(s) and/or exercise(s);
 - ten multiple choice questions for the post-test of the course unit and final examination. The questions should cover the core content;
- 2) provides activity modules such as forums to build collaborative communities of learning around subject matter. Each programme unit has its own forum for interactive discussion (student-student and student-faculty) and team exercises. Other forums are the Course Director communications forum, the thesis forum, the technical forum and the general forum;
- 3) Provides a videoconference area for broadcasting lectures.
- 4) Provides a chat area.
- 5) Provides the final examination.
- 6) Provides the tools for tracking the activities of the students.
- 7) Provides links to the EMDM Alumni Association and to the websites of the involved universities and institutions.
- 8) Provides general information about the EMDM (eg, learning objectives, Faculty, application requirements and procedures).

3.7.3. Two-week face-to-face training period

For the EMDM edition 2017-18, the residential course will run from **May 25th to June 8th, 2018**.

The Strategic Management Board is responsible for deciding on the location of the two-week training period and it will be organized in premises with appropriate accommodation, conference rooms and IT facilities.

The Organizing Universities reserve the right to record classes for educational purposes. When students participate in these classes, they automatically give permission to appear in these

recordings for distribution within the electronic learning platform. The teacher will inform the students that the class will be recorded at the beginning of such classes.

3.7.4. Electronic libraries

The students will have access to the electronic libraries of the Organizing Universities.

Currently, they also have a free access to the electronic version of the textbook “Koenig and Schultz’s Disaster Medicine: Comprehensive Principles and Practices”.

3.8. Staff

The Faculty is nominated by the Faculty of the Medical Schools of the both Organizing Universities based on a proposal of the Strategic Management Board. They can be members of the both Medical Schools of the Organizing Universities, members of the Associate Universities and Institutions, or qualified professionals in disaster medicine, disaster management and humanitarian health. The same is valid for tutors.

The list of the Faculty and tutors together with the composition of the Strategic Management Board of the academic year 2017-2018 is provided in a separate file.

3.9. Tutoring

Each student is linked to a tutor who supervises his educational activities. The tutor has regular contacts with the students assigned to them. The students can approach the tutor with any questions that they might have and they can also directly contact the individual lecturers via the e-learning platform.

3.11. Number of enrolled students

Due to the format of the program, the number of participants will be limited to 35.

A maximum of 10 extra places in addition to the mentioned 35 could be reserved to students of the previous EMDM editions who did not complete the course. In such cases the Strategic Management Board will evaluate the credits needed to complete the course and the additional administrative fee. The selection will be performed by members of the Strategic Management Board of the Master based on the documentation provided with the application.

The minimum number for organizing an EMDM edition is 15 full paying students.

3.12. Entry requirements

The course is addressed to all health professionals involved in the medical disaster management and humanitarian health response at local, national and international level.

3.12.1. Academic requirements

The minimum admission requirement is a **degree in medicine** (at least 300 ECTS), or a **different health degree** obtained from any University across the world (equivalent to the minimum total ECTS required). Applications from students with a different academic background will be evaluated case-by-case by the Strategic Management Board.

Practical experience in disaster management and humanitarian assistance (in governmental or non-governmental organizations) and in emergency medicine, public health and humanitarian health are positively valued.

3.12.2. Requirements in relation to language proficiency

Prospective students who are not nationals of a Member State of the EEA can provide proof of sufficient knowledge of English as the language of instruction by meeting one of the following criteria:

- have a diploma of primary, secondary or higher education where English was the language of instruction;
- have successfully completed at least one school year of secondary education where English was the language of instruction;
- have successfully completed program units in higher education with a minimum total of 15 ECTS where English was the language of instruction;
- have successfully completed ASO secondary education in Belgium;
- have successfully completed one of the following language tests:
 - a. TOEFL: minimum level 213 computer-based, 80 internet-based;
 - b. IELTS: minimum level academic module 6.5;
 - c. Cambridge Certificate of Advanced English (CAE), grade B;
 - d. Cambridge Certificate of Proficiency in English (CPE), grade C;
 - e. TOEIC: minimum level: 860.

Exceptions to language requirements may be granted by the Course Director on the basis of an interview.

3.12.3. Administrative requirements

The application form can be downloaded at the EMDM website (www.dismedmaster.com),

For the academic year 2017-2018, the application form and the requested documentation must be sent **from August 1st, 2017 and not later than October 1st, 2017** to the following address:

**Segreteria del Master di Medicina dei Disastri
Scuola di Medicina Università del Piemonte Orientale "Amedeo Avogadro
Via Perrone 18, 28100 Novara - Italia**

The application form must be accompanied by

1. a copy of a diploma giving proof of the University graduate level in a subject of health or all documents certifying equivalent professional qualification or a formal declaration (Art. 46 m DPR 28/12/2000, n. 445, Italian law);
2. **for non-italian students** a formal, official translation into Italian of the diploma;
3. **for non-Italian students**, the so called “Declaration of Value” (Dichiarazione di Valore), released by the Italian Consulate/Embassy of the country where the graduation has been taken;
4. a copy of all the documents that could be considered valuable for the admission to the Master;
5. a curriculum vitae containing information on previous research experiences;
6. an e-mail address;
7. an accompanying letter signed by a local mentor or advisory which will include the motivation for the application;
8. a copy of a valid passport or ID card.

For **students coming from non-European Community countries**, the application form and all the required documents could be delivered to the Italian Consulate or Embassy (M.I.U.R. Prot. N. 1129 del 08.05.2003) of their own country of residency or may be sent to the address reported above in due time. In the first case the Consulate/Embassy will send the application form and the documents directly to the Secretariat of the Master.

3.13. Enrolment arrangements

3.13.1. Evaluation of the application documents

The application documents will be evaluated by an Ad Hoc Commission composed of the Course Director and representatives of the Administrative Offices of one of the Organizing University.

3.13.2. Selection of the students

The Strategic Management Board will select the students to be enrolled in the EMDM program on October 16th, 2017. The list of enrolled students will be published on the EMDM website and the websites of the Organizing Universities before October 25th, 2017.

The criteria used in the selection process are the academic background, previous experience disaster management, research experience, motivation and language competences.

3.13.3. Enrolment procedure

For the academic year 2017-2018, the selected student must send to the

Segreteria del Master di Medicina dei Disastri,

Scuola di Medicina, Università del Piemonte Orientale “Amedeo Avogadro”,

Via Perrone 18, 28100 Novara, Italia

before November 7th, 2017, the following documents:

1. a request of enrolment, signed in original, addressed to the Rector of the University (provided by the Administrative Secretariat of the Master or downloaded from the EMDM website www.dismedmaster.com);
2. a formal declaration not being a student of another University programme (for Italian students);
3. a proof of payment of the due fee or an official document giving proof of a scholarship;
4. two photographs

The bank account for the payment of the registration is the following:

- **for Italian students financially supported by a public institution**, the fee should be deposited through the:

Banca Popolare di Sondrio – Filiale di Vercelli “Conto di Tesoreria n. 158384”

- **for all other students, the payment must be made by bank transfer as follows:**

Banca Popolare di Sondrio – Filiale di Vercelli

Account entitled to Università del Piemonte Orientale – Master di Medicina dei Disastri

IBAN: IT91Y0569610000000010000X96

BIC/SWIFT: POSOIT22

In both cases, the purpose of the payment must indicate:

« AMMCE – Master in Medicina dei Disastri 2017 (EMDM) – **First and Family name** of the student the payment is made for »

Each student will receive a personal document declaring his/her enrolment in the EMDM.

3.13.4. Enrolment fee

The enrolment fee for the XVI edition of the EMDM is of 7032 €.

The fee includes:

- the full EMDM academic program, the educational materials and the access to the EMDM e-learning platform for the entire duration of the course.
- accommodation in a four-star hotel in full board service, social program and medical insurance for the two-week residential course.

The fee does not include:

- the travel expenses to attend the two-week residential course;
- all the expenses not specified above.

The enrolment fee should be paid at the enrolment procedure and not later than November 7th, 2017. Non-payment can be sanctioned with a suspension of enrolment.

The possibility to pay in instalments has to be authorized by the Course Director in agreement with the Administration of the University. In such a case no more than two instalments will be allowed and the full fee should be due before the residential course.

In the case the student, **for any reason**, will not complete the program, the fee will not be reimbursed. However, in the event of circumstances beyond their control students may ask to be enrolled in the next academic year, provided that the necessary proof can be produced. Any incidence of force majeure and a request to be re-enrolled in the next academic year as a result thereof, must be reported by the student in writing by e-mail to the Course Director.

The tuition fee for the students enrolled before 2016 who apply to complete the course is a fixed amount of 700 € plus a variable amount representing the balance between the current fee and the fee payed at the time of the admission. The above-mentioned amount does not include the hotel accommodation if the participation to the two-week training session is considered as mandatory by the Strategic Management Board.

3.13.5. Scholarships

Currently, no scholarships are available. If any will be made available, this information will be published on the EMDM website before the application delivery time will start.

3.13.6. Nullification of enrolment

Enrolment which was undertaken on the basis of incorrect or false, though essential information, will be declared invalid by the Strategic Management Board.

3.14. Flexibility

All teaching activities must be open to every student who fulfils the entry requirements and every enrolled student must be given equal opportunities. This may call for invoking reasonable flexibility (in compliance with the criteria of feasibility, acceptability and justifiability), whereby derogations are granted to individual students, in specific circumstances.

Following a specific request of the student, the Strategic Management Board can extend the submission deadline of the Master's thesis. A maximum of 12 months is considered as a reasonably flexible deviation in specific cases that will be authorized by the Strategic Management Board with the approval of the Thesis Coordinator. After this deadline, any further postponement will not be authorized.

3.15. Learning and teaching evaluation

3.15.1. Continuous quality improvement

The Education Committee, which is composed by the Course Unit Coordinators, is in charge of the continuous quality improvement (CQI) of the EMDM.

The CQI activities consist of:

- 1) the internal quality assurance process including
 - the definition of the criteria for the quality improvement process in compliance with the education regulations of the Organizing Universities;
 - the evaluation of the curriculum vitae and didactic qualifications of the Faculty and tutors;
 - the liaison on regular basis with the programme unit coordinators to gather feedback on the quality of educational materials and the Faculty in their respective programme units;
 - the submission to the Course Director and the Strategic Management Board of recommendations for remedial action and corrective adjustment about the quality improvement process and the content, format, learning methods, and evaluation procedures of the EMDM programme.

- 2) the evaluation process of the study programme including:
 - the analysis of students' evaluation of the profile of the Faculty and tutors, the content and learning methods of the e-learning platform, the two-week training period and the organizational aspects of the EMDM programme;
 - the revision of tools for Faculty and tutor evaluation;
 - the submission of reports and recommendations to the Course Director and the Strategic Management Board about the activities of the Faculty and tutors.

- 3) the assessment process and tools to evaluate the students including:
 - the review the quality of the student assessment rubrics and tools;
 - the monitoring of the correct application of the assessment tools by the Faculty, thesis evaluators and tutors.

3.15.2. Learning evaluation

The students' evaluation will be defined using specific rubrics applied to the different parts of the course:

	e-learning	Two-week training session	Final exam	Master's thesis
Objectives	Engagement	Competencies	Content knowledge	Research skills
Assessment tool	MOODLE report	Task assessment rubric	Online exercise and multiple-choice questionnaire	Thesis assessment rubric
Final grading points	30/110	30/110	10/110	40/110

The learning assessment of the students includes preliminary, continuous and end-of-term assessments.

3.15.2.1. Preliminary assessment

The main purpose of preliminary assessment is to maximize learners' ability to succeed the learning programme providing them and the Faculty with tips based on students' needs and weaknesses. Knowing participants' educational background and experience helps teachers to optimize the content and learning methodology of the programme.

3.15.2.2. Continuous assessment

3.15.2.2.1. E-learning

The MOODLE report tool (student tracking system) is used to measure and evaluate student engagement in the e-learning environment. It evaluates the pattern of the interaction between the students and various learning objects of the e-learning courseware. The two main fields of the report are *views* and *posts*. The former refers to the data about access to an object such as a student who accesses the system to view a lecture on the e-learning platform. The latter includes access to forums, exercises and tests provided on the e-learning platform. The view-post ratio is used to examine the level of interactivity.

The student's activities on the e-learning platform are also assessed by the tutor using the Tutor Monitoring Form and the Collaborative Assessment Rubric.

3.15.2.2.2. Two-week training session

The Course Director and Faculty assess students' competencies acquisition and score against the EMDM learning outcomes, using the Task Assessment Rubric. The competencies for disaster training are identified according to the current literature and taking in consideration the wide range of targeting students.

3.15.2.3. End-of-term assessment

3.15.2.3.1. Final examination

An on-line examination composed of an electronic simulation exercise of a disaster presenting medico-organizational and medical care problems and a multiple choice questionnaire composed of questions on the core content of the e-learning programme is proposed as final examination. It is delivered at the end of the programme.

3.15.2.3. 2. Master's thesis

The supervisor(s) and assessors assess and mark a Master's thesis using the "Thesis Assessment Rubric" in order to mark the theses in a uniform way.

The reports drawn up by the supervisors and assessors shall be made available to the Thesis Coordinator who shall make a summary report to the attention of the members of the Strategic Management Board that in its capacity as Examination Board is responsible for the final assessment. The thesis will be evaluated based on originality of the subject, data collection and analysis, writing, and impact on current disaster medicine theories and practices.

The different assessment rubrics are provided in *Annex 3*.

3.15.2.4. Final grading

The final grading (110/110) will be based on the following marks:

1. Participation in the e-learning program = 30/110
2. Contribution to the residential course = 30/110
3. Evaluation of the thesis = 40/110
4. Final examination = 10/110

The Master Degree will be delivered for a final score $\geq 65/110$.

3.15.3. Teaching evaluation

The aim of the teaching evaluation is to optimize the teaching process and to detect, or possibly remedy, any problems in the teaching process; in the second place, the teaching evaluation serves as a general satisfaction survey on the quality of the education provided.

The teaching evaluation is a standard survey for each program unit, each lecturer within that program unit and each tutor, concerning satisfaction with the following aspects: the content of lectures and the teaching abilities of the lecturer, the quality of the program material, the organization and the content of working lectures, practical work & exercises, the examination method, the experience of the time spent in study and the interaction between the tutor and the student. In addition to this program unit-specific survey, a questionnaire is supplied at the end of the

final exam to gauge general satisfaction levels with regard to the program as a whole and program facilities.

The education evaluation is semester based, i.e. it is conducted twice a year immediately following the two-week training session and the final exam.

The education evaluation is done electronically through the e-learning platform not accessible to third parties. Students gain access with an individual login and password.

Necessary steps are taken to safeguard the anonymity of the students taking part in the survey.

In order to obtain representative data, participation is mandatory for all students.

All survey results are analyzed by the Education Committee that will submit a report and recommendations to the Course Director and the Strategic Management Board about the activities of the Faculty and tutors.

Students' individual evaluation results as per program unit are reported on the EMDM website to the lecturers involved, who may consult these results using their personal password.

The overall results include bar charts representing the average level of satisfaction for each program unit which is being assessed, taking into account all the evaluation aspects as well as participation figures, perceived study time load and the results from the additional questionnaires dealing with the program as a whole and program facilities.

The individual results per program unit or a part thereof include at least an average value and a signaling value, both expressed in categories (Very Poor – Poor – Average – Good – Very Good), and can be joined by accompanying written comments from students. The signaling value is within the lowest 34th percentile on the (very poor to very good) scale. If the signaling value is poor or very poor, and more than one student reports at least one educational aspect as poor or very poor (lecture, study material, or exam), it is seen as a problem signal, which needs further monitoring by the Education Committee.

4. Examination regulations

4.1. Organization of exam

4.1.1. Taking exam

Students shall only be permitted to take exams if they are properly enrolled for the academic year concerned and if have paid the tuition fee.

4.1.2. Exam format

The final exam is proposed as an on-line examination composed of an electronic simulation exercise of a disaster presenting medico-organizational and medical care problems and a multiple choice questionnaire composed of questions on the core content of the e-learning programme.

4.1.3. Number of exam opportunities

Students are entitled to two exam opportunities for the program, in so far as they have not obtained any credit certificate after the first exam opportunity.

4.1.4. Scheduling of exam and resetting exam

The exam will take place at the end of the academic year. The exact date of the exam and resetting exam will be fixed by the Strategic Management Board and announced at the EMDM website.

4.1.5. Exam procedures

4.1.5.1 Proctoring process

Remote students who are unable to have the exam in the premises of the Organizing Universities are expected to make their own proctoring arrangements. The proctor procedures and application form will be published on the e-learning platform.

4.1.5.2. Force majeure

Students shall observe strictly the timetable and location set for an examination. In the event of circumstances beyond their control students may ask for an exam to be rescheduled, provided that the necessary proof can be produced. Any incidence of force majeure and a request to re-schedule the exam as a result thereof, must be reported by the student in writing by e-mail to the Course Director at the latest on the day of the exam.

Original documentation to substantiate force majeure shall be submitted to the Course Director within three calendar days of the exam date and.

The Course Director shall decide whether a re-scheduled exam is organizationally possible and in the event of a positive decision shall set a new exam schedule.

4.1.6. Results

Students shall be given feedback on their exam results. Every student shall receive personally at his/her personal e-mail address his/her individual exam score.

4.1.7. Failure to report or termination of participation

If a student fails to report for the exam or ceases participation, he/she shall inform the Course Director in writing by e-mail and without delay, who shall subsequently inform the Strategic Management Board.

4.2. Master's thesis regulations

4.2.1. Introduction

As other branches of medicine, disaster medicine needs a scientific basis. Identification of effective and efficient methods of improving the medical aspects of vulnerability, prevention, preparedness, response and recovery in case of disaster, are only minimally available. Master's theses should contribute to the identification and establishment of evidence-based data with respect to disaster medical management.

The Master's thesis forms an important and compulsory part of the EMDM study programme, as it takes up $\frac{1}{3}$ of the credits and a weight factor of 40/110 for the degree.

The aims of the thesis are

- to critically apply the acquired knowledge and understanding from the study programme;
- to develop skills and attitudes concerning the design and organization of scientific research on disaster medicine;
- to contribute to the further academic development of disaster medicine.

The thesis is written individually and independently by the student. It is written in the English language. It should contain a clear hypothesis or the development of a tool for further research, and should not simply be a compilation of literature data or a description of existing systems. A specific topic on thesis concept and methodology, included in the Module on Research on Disaster Medicine, will support the student in the design and development of his thesis.

The quality and novelty of the Master's thesis is expected to result in a scientific publication in a peer-reviewed journal or book and/or in a presentation at national/international congresses on disaster medicine.

4.2.2. EMDM Master's Thesis Coordinator

The Strategic Management Board will appoint each academic year a Master's Thesis Coordinator (TC). The Research Group on Emergency and Disaster Medicine (ReGEDiM) of the VUB will act as TC for the academic year 2017-2018.

The TC is responsible for the coordination of all the activities related to the Master's thesis.

4.2.3. Thesis subject

By the end of April 2018 the students shall provide the TC:

- the thesis proposal,

- the contract with the Master's thesis supervisor as approval of the subject.

The thesis proposal has to be presented at the residential session to a scientific committee composed of one representative of the organizing universities (UPO and VUB), faculty members, experts in research methodology and tutors. If indicated, the student shall provide the TC an updated thesis proposal.

In order to facilitate the choice of a thesis subject, the TC will publish a list of thesis topics of previous EMDM editions on the thesis forum of the EMDM e-learning platform.

Subject changes, a change of supervisor at the student's initiative or dereliction of duty on the part of the supervisor shall be reported to the TC in writing stating full reasons. In accordance with the provisions of the first paragraph, with the exception of the deadlines specified, a new subject shall be chosen and/or another supervisor appointed.

Research with human participants must comply with international, national and local regulations and with relevant codes established by the medical profession, such as the Declaration of Helsinki. The approval for the involvement of human subjects in research by an Institutional Review Board or Ethics Committee must be obtained, if applicable. The letter of approval must be included as an appendix to the thesis.

4.2.4. Supervisor(s)

A thesis supervisor is an EMDM Faculty member, an EMDM Alumnus who successfully graduated, a full, associate or assistant professor or a postdoctoral research assistant attached to a Research Centre. A local co-supervisor can be appointed, if appropriate.

A supervisor oversees the conduct of the thesis on a regular basis, offers guidance, advises on matters connected to the research study, and offers encouragement during a difficult period.

Students also have responsibilities toward their supervisors. They should develop clear expectations with supervisors concerning availability and meeting/contact times. Students have a responsibility to make contact and work with supervisors rather than expect that supervisors will contact them. They undertake to keep their supervisor informed of progress made. A contract that spells out the expectations of supervisors and students will define the terms of these relationships. The contract will be delivered to the TC.

Any difficulties in the fulfillment of the contractual obligations should be reported, in writing, to the TC. The Course Director and the TC shall subsequently come to a decision which may lead to a change of supervisor or annulment of a supervisor's duties toward a student and shall report this event to the Strategic Management Board.

It is expected that the thesis will result in a scientific publication in a peer-reviewed journal or book and/or in an international conference presentation. By contract, the name(s) of the supervisors are to be included as co-authors.

4.2.5. Assessors

As a general rule, assessors are members of the EMDM Faculty who will assess the Master's thesis. The Thesis Coordinator may decide to appoint an external expert as assessor.

The TC shall appoint the assessors for the evaluation of each Master's thesis.

4.2.6. Submission date

The submission date is fixed by the EMDM Strategic Management Board.

An extension of the time limit for the thesis submission can be given on an individual basis by the Course Director after consultation with the Thesis Coordinator.

4.2.7. Submission

The Master's thesis shall only be submitted electronically, preferably in PDF format to the TC after approval of the supervisor(s).

Two paper copies will be sent to the Course Director.

The technical details of the thesis editing requirements will be provided on the thesis forum of the EMDM e-learning platform.

4.2.8. Assessment

The TC shall organize the assessment process.

The supervisor(s) and assessors shall discuss, assess and mark a Master's thesis using the "thesis assessment rubric" in order to mark the theses in a uniform way. Unsatisfactory assessments should be justified.

The reports drawn up by the supervisors and assessors shall be made available to the TC who shall make a summary report to the attention of the members of the EMDM Strategic Management Board that in its capacity as Examination Board is responsible for the final assessment.

4.2.9. Research misconduct

Scientific misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. Fabrication is "making up data or results".

Falsification is "manipulating research materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research record".

Plagiarism is "the appropriation of another person's ideas, processes, results, or words without giving appropriate credit".

Anyone who is aware of a potential act of misconduct shall immediately report in writing this act to the TC. Any complaint will be examined by the Strategic Management Board in accordance of the examination regulations of the Organizing Universities.

4.2.10. Property

The Master's thesis is a compulsory part for the requirement of the degree of Master of Science in Disaster Medicine and as such is the property of the EMDM and the Organizing Universities.

The Master's thesis will be included in the thesis libraries of the EMDM, EMDM-Alumni and Organizing Universities. The author of the thesis grants to the EMDM permission to reproduce and distribute publicly paper and electronic copies of the thesis document in whole or in part.

The author and/or supervisor(s) can use the thesis material for educational purposes, but they shall mention that the thesis material is the result of a thesis submitted in partial fulfilment of the requirements for the degree of European Master in Disaster Medicine.

4.2.11. Publication – Conference presentation

It is expected that the thesis will result in a scientific publication in a peer-reviewed journal or book and/or in an international/national conference presentation. It is the role of the supervisor(s) to support the student in the development of an article or conference presentation and to advise the student on the most appropriate journal or congress.

As indicated in 4.2.4., by contract, the name(s) of the supervisor(s) are to be included as co-author(s) in an agreed order of authorship.

It should be mentioned that the publication is the result of a thesis submitted in partial fulfilment of the requirements for the degree of European Master in Disaster Medicine.

As abovementioned, the Master's thesis is the property of the EMDM and the Organizing Universities. Consequently, you must request a permission of the EMDM Thesis Coordinator and Course Director to submit the manuscript to the journal editor.

4.3. Examination Board

The Strategic Management Board takes the role of examination board.

The Chairman of the Strategic Management Board is appointed chairman of the examination board.

The Thesis Coordinator may participate in the meetings of the examination board with an advisory vote.

The examination board can take decisions without convening its members physically but instead by organizing the meeting by all means of communication that provide for a collegial exchange between members

The Course Director shall record in the meeting minutes the proceedings of the examination board. The minutes will be signed by the Chairman of the examination board and the Course Director.

A decision regarding a given student is reached by consensus vote.

The members of the examination board and all those present at the meeting are bound to guarantee the confidentiality of the discussions.

4.4. Master Degree

The Master Degree is named “Master of Science in Disaster Medicine” (MScDM).

The Master Degree will be jointly issued by the Organizing Universities, in compliance with the relevant legal provisions.

A student shall be awarded a degree

The Master Degree will be awarded to the student if he has successfully completed the entire program and has fulfilled all the administrative requirements, including the full payment of the enrolment fee.

4.4.1. Achievement levels

The following achievement levels shall be applied with regard to the MScDM:

- a student has passed with merit if the average final result is less than 68%;
- a student has passed with “cum laude” if the average final result is 68% or higher;
- a student has passed with “magna cum laude” if the average final result is 77% or higher;
- a student has passed with “summa cum laude” if the average final result is 85% or higher.

4.4.2. Diploma

The Organizing Universities will issue a joint diploma with the seals or logos and the signatures of the Rectors of both Universities, indicating the official name of the Master Degree.

5. Transitional and concluding provisions

These regulations will be revised yearly and adapted, if appropriate, by the Strategic Management Board and submitted for approval to the appropriate bodies of the Organizing Universities.

The Education and Examination regulations are an integral part of the “Convention for the Organization of an Advanced Master of Science in Disaster Medicine (European Master in Disaster Medicine) by the Università degli Studi del Piemonte Orientale and the Vrije Universiteit Brussel”.

These regulations, as approved by the Strategic Management Board’s meeting of June 27-28, 2017, shall come into force as from the EMDM XVI edition (academic year 2017-2018).