



# CURRICULUM for the PhD DOCTORAL PROGRAM at the Medical University of Graz

Version 04

## History of Resolutions and Revisions

Version	Date of Resolution <sup>1</sup>	Date of Approval <sup>2</sup>	Summary of Revisions / Date	Effective Date
01	7.12.2005	11.1.2006	Establishment of the degree program	1.5.2006
02	14.3.2006	15.3.2006	Adaptation of the University Act amendment	1.5.2006
03	16.5.2007	23.5.2007	Expansion of § 4	6.6.2007
	5.3.2008	12.3.2008	Editorial changes (Dissertation Committee)	12.3.2008
	4.3.2009	25.3.2009	New paragraph 5 in § 6	1.10.2009
04	8.6.2011		Streamlining of § 4, specification LVen, proof of ECTS points for the curricular part is omitted. Editorial changes	1.10.2011

<sup>1</sup> A decision of the Academic Board for Doctoral Programs

<sup>2</sup> Approval of the Senate

## **Goals**

### **§ 1. Goal and Purpose of the PhD Doctoral Program**

The PhD Doctoral Program (in following abbreviated as PhD Program) serves to train the skills necessary to contribute to the development of the medical sciences through independent research and the achievement of new scientific findings, and in this way strives to promote future generations of research scientists in the field of medical and natural sciences. A detailed formulation of the educational goals and the qualification profile can be found in Appendix I.

The doctoral program, as a third cycle in the Bologna process, is both an education as well as a productive research activity. The students are both researchers at the beginning of their careers within the scope of the “European Charter for Researchers”<sup>3</sup>.

## **Admission Requirements**

### **§ 2. Admission to the PhD Program**

(1) Completion of a degree program in Human Medicine or Dental Medicine or a scientific or technical degree program/Master’s program relevant to the dissertation topic is required for admission to the PhD Program.

(2) Admission to the Phd Program may also be granted if a degree program equivalent to the degree program named in Paragraph 1 has been completed at a recognized Austrian or post-secondary educational institution abroad. The equivalency shall be determined by the Rector’s Office during the course of the admission process.

(3) Persons who meet the admission requirements according to § 2 para. 1 or 2 are eligible to apply for one of the advertised dissertation topics with the framework of the thematic programs (§ 4). The Dean shall award the topic to the applicants based on suggestions of the faculty of the program responsible for the subject.

## **Duration of the PhD Program**

### **§ 3. Duration of the PhD Program**

The PhD Program consists of a single study period with a duration of six semesters.

<sup>3</sup> OJ L 75/67 of March 22<sup>nd</sup>, 2005, Commission Recommendation of March 11<sup>th</sup>, 2005 on the European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers (2005/251/EC).

# Programs

## Programs

### § 4. Programs

(1) The PhD Program at the Medical University of Graz is organized primarily in the form of interdisciplinary thematic programs.

(2) Scope and Name of the Programs.

A program should include a clearly defined subject area that is not too narrow and which represents a focus on research at the Medical University of Graz.

(3) Members of the Programs (Faculty).

Members of a programs are qualified university teachers with a qualification to teach, who themselves are active scientifically in the respective field, and who act as advisors for PhD dissertations. The Dean appoints the members of a program based on the suggestion of the Spokesperson of the Program. University teachers from other universities may also become members of a program. If the above conditions are no longer given, membership expires after one year.

In the following, program shall also be understood to include the Faculty (members) of a program.

(4) Spokesperson of the Program.

The members of a program elect a Spokesperson and a Deputy Spokesperson. The Spokesperson is responsible for the internal coordination of the program and represents the Program to the public.

(5) The program is responsible in accordance with the curriculum for a high-quality education program.

(6) Establishment of Programs.

Following a relevant call for tender by the Rector's Office, applications for the establishment of a program can be submitted through a Proponent Committee to the Dean. The Dean shall then carry out a review process (the process of the FWF for the award of Doctoral Programs can serve as model).

Criteria for assessing the applications are:

- Scientific quality of the proposal
- Continuity with the strategy of the university
- Future potential of the program
- International and national networking
- Need for the development of the university
- Existing potential (people, resources, results)
- Critical size for continuous work achieved
- Requirements for supervision and involvement of the PhD students in a productive workgroup is given
- Reviewed and funded (dissertation) projects exist

A commission consisting of the Dean, Study rector, Deputy Department Head of the Organizational Unit for Teaching and Studies, and the spokesperson from the Academic Board for Doctoral Programs shall decide on the approval of the program. In the event of a tie, the Dean shall cast the deciding vote.

(7) Inter-university programs can also be established and existing programs can participate in, or propose such inter-university programs.

The division of the teaching responsibilities in accordance with § 5 as well other cooperation shall be determined and defined in the cooperation agreement.

The procedure is the same as in Paragraph 6

## **Courses**

### **§ 5. Courses**

(1) During the doctoral program, the following degree courses are to be successfully completed:

Fundamentals in Natural Science Methods for Physicians:

Graduates of a degree program in Human Medicine or Dental Medicine have to complete courses with a total of 3 semester hours in the fundamentals of empirical work in the medical and natural sciences and an introduction to the subject are of the selected program.

Fundamentals in Medicine for Natural Scientists and Technicians:

Graduates of a degree program in the natural sciences have to complete courses with a total of 3 semester hours in the fundamentals of medicine and an introduction to the subject are of the selected program.

General Principles and Skills

A total of 4 semester hours shall be completed in chosen courses from the fields of scientific theory, ethics, use of statistical methods, methods for planning, documentation, evaluation, and (meta) analysis of medical studies and experiments, writing scientific papers, presentation technique, university didactic, scientific English, organization of scientific projects, etc.

Dissertation Seminars

A total of 8 semester hours shall be completed in the field/sub-discipline relevant to the topic of the dissertation and exercises for doctoral students.

Literature Clubs (Critical Paper Review) and Project Presentation

Courses (seminars) in which the relevant technical literature and project reports are critically presented and discussed for a total of 10 semester hours.

Presentation of the Dissertation Topic

In the first semester a presentation of the dissertation topic and the work plan shall be prepared for the Dissertation Committee for a total of 0.5 semester hours.

Interim Report to the Dissertation Committee

In the third and fifth semesters, written interim reports shall be prepared and presented to the Dissertation Committee for a total of 0.5 semester hours. The Spokesperson will forward the interim report and a written assessment by the Dissertation Committee to the Dean for the doctoral program.

Public Presentation

During the course of the program, three public presentations shall be prepared and presented for example at the Doctoral Day of the MUG or at a convention, for a total of 0.5 semester hours.

Table 1 shows a possible course schedule for the semesters.

(2) The courses shall always be held in English.

(3) The courses are proposed by the programs and approved by the Dean.

(4) At least 50% of the courses shall be completed at the Medical University of Graz. The interim reports must be made at the Medical University of Graz.

(5) The successful completion of the courses is determined by the completion of course examinations and courses with continuous performance assessment with a passing grade. The sum of all course examinations represents the first part of the oral dissertation examination.

Table 1

<b>Suggested Semester Schedule</b>	<b>Semester Hours</b>
<b>1. Semester</b>	
Fundamentals for Physicians or Natural Scientists	3
Literature Club and Project Presentation	2
Presentation of the dissertation topic and the work plan before the Dissertation Committee	0,5
<b>2. Semester</b>	
General Principles and Skills	2
Dissertation Seminars	2
Literature Club and Project Presentation	2
<b>3. &amp; 5. Semester each</b>	
Dissertation Seminars	2
Literature Club and Project Presentation	2
Interim report to the Dissertation Committee	0,5
Public Presentation (e.g. Doctoral Day)	0,5
<b>4. Semester</b>	
Dissertation Seminars	2
General Principles and Skills	2
Public Presentation (e.g. Doctoral Day)	0,5
<b>6. Semester</b>	
Literature Club and Project Presentation	2
<b>Total</b>	<b>28</b>

# Dissertation

## § 6. Dissertation

(1) With the dissertation, the student provides evidence that they have acquired the ability to independently solve important issues in current scientific research. The dissertation must therefore represent an independent original work that the student has prepared and written on their own, the latter of which shall be confirmed by the student in a preamble to the dissertation. The student must further confirm that the Good Scientific Practice rules of the Medical University of Graz were observed during work for the dissertation and the publication. A cumulative dissertation, for example consisting of an introduction and several published publications is not allowed.

The dissertation must be written in English. An abstract of the dissertation must be submitted in English and German.

(2) During the PhD program the student shall be supported and guided by an advisor. For interdisciplinary research projects, a second advisor can be appointed who must have a deep technical understanding of the topic of the dissertation. The role of advisor to the student ends upon completion of the final oral dissertation examination, at the latest however after four years. In the event of extenuating circumstances, the Dean may extend the duration of the advisor role at the request of the student and with the approval of the advisor.

(3) A university teacher with an authorization to teach (in accordance with § 103 Universities Act 2002) will be assigned as an advisor.

(4) For each dissertation, the Dean will assign a three-person Dissertation Committee which will be headed by the advisor. One member must be from outside the institute or clinic where the work is performed. The Dissertation Committee supports and advises the student in the subject area and will invite them at least once a year to a personal meeting in which the student shall present their interim report. The Dissertation Committee shall meet at regular intervals of at least once a year to assess the progress of the work. An extraordinary meeting of the Dissertation Committee may be requested by the advisor, a committee member, or the student.

(9) The completed dissertation shall be submitted via the Dean to the Study rector, who will in turn present it to two reviewers in accordance with § 45 of the part of the statute on study law of the MUG. Requirement for the forwarding of the dissertation to the reviewers is the intention to print, or the submission to at least one publication on the results of the dissertation with the student as the primary author in an SCI-listed journal. If this is not the case, particular justification must be given by the Dissertation Committee.

(6) The expert opinions and result of the assessments shall be given to the student immediately in writing.

(7) The student shall publish the positively assessed dissertation before being awarded the academic degree in accordance with the regulations of § 86 Universities Act 2002 as amended.

# Examination Regulations

## § 7. Examination Regulations

- (1) The dissertation seminars and literature clubs are courses with continual performance assessment.
- (2) The doctoral program is completed with the final comprehensive oral examination as a public comprehensive oral examination before a committee.
- (3) The student has the right to register with the Study rector for a final comprehensive oral examination if the following conditions are met:
  - a) The successful completion of the first part of the comprehensive oral examination, ie the completion of all course examinations and courses with continuous performance assessment with a passing grade.
  - b) The positive assessment of the dissertation.
- (4) The final comprehensive oral examination includes the defense of the dissertation and the examination of the field/sub-discipline which is relevant to the dissertation.
- (5) The Study rector shall form an Examination Board consisting of three people to conduct the final comprehensive oral examination. An examiner shall be assigned for each examination subject. One member shall be appointed Chairperson of the Examination Board. The Study rector shall select the examiners for the Examination Board from among those university teachers at the Medical University of Graz with an authorization to teach in the respective examination subject (§103 Universities Act 2002). If necessary, people with authorization to teach at other Austrian universities and at recognized universities or colleges abroad may serve as examiners provided their authorization to teach is equivalent to the authorization to teach at the Medical University of Graz and is for the relevant examination subject. The advisor of the dissertation shall be appointed as an examiner unless there are compelling reasons against such an appointment.
- (6) The student shall be informed of the composition of the Examination Board and the names of those assigned as examiners at least four weeks prior to the examination.
- (7) The final comprehensive oral examination shall be conducted as a public oral examination by the entire Examination Board and shall last no longer than one and a half hours. The examination language is English. During the examination, a brief presentation of the dissertation shall be made, and the results obtained shall be defended (*defensio dissertationis*). In addition to the assigned examiner, all the members of the Examination Board may ask questions during the examination of the dissertation subject, provided they have authorization to teach the relevant examination subject.
- (8) During the final comprehensive oral examination, the candidate shall prove their scientific qualifications and their thorough familiarity with the main issues of the examination subjects.
- (9) The Chairperson of the Examination Board shall ensure that the final comprehensive oral examination is conducted in an orderly manner and shall keep a record of the examination. This record shall contain the subject of the examination, the place and time thereof, the name of the Examination Board members, the name of the student, the questions asked, the grades given, the reasons for a non-passing grade, and any unusual occurrences.

(10) The discussion and vote on the result of the final comprehensive oral examination with regard to all the examination subjects shall be held in a closed session of the Examination Board as arranged between the members. The decisions of the Examination Board shall be determined by a majority vote, whereby the Chairperson, who exercises the same voting rights as the other members, shall cast their vote last. When casting their vote, each member of the Examination Board shall consider the results of the individual examination subjects as well as the overall impression of the final comprehensive oral examination.

(11) If the Examination Board is unable to reach a decision on a grade, the proposed grades of the members shall be added, the sum divided by the number of members, and the result then rounded mathematically to give a whole number for the final grade. The final comprehensive oral examination shall only then be deemed successfully completed when each examination subject in accordance with Paragraph 5 has been awarded a grade of at least "satisfactory". If a grade of "unsatisfactory" is given for more than one examination subject, the final comprehensive oral examination must be repeated in its entirety, otherwise the repeat examination shall be on the examination subject not passed.

## **Doctoral Title and Conferral of the Doctorate**

### **§ 8. Doctoral Title and Conferral of the Doctorate**

(1) The Study rector shall officially award the graduates of the PhD Doctoral Program the academic title of "Doctor of Philosophy", abbreviated "PhD", by written notification without prejudice to the holding of academic ceremonies in celebration of the conferral of the doctorate immediately after completion of the final comprehensive oral examination, but no later than one month after completion of the final comprehensive oral examination:

(2) The notice of the conferral of the doctorate shall include the following information:

- a) The surname, first name, previously earned degrees and maiden name if different from the surname.
- b) The date of birth, place of birth and nationality.
- c) The completed degree program including the field/sub-discipline of the dissertation, the compulsory and elective courses taken, and the title of the dissertation.
- d) The academic title to be conferred.

## **Transitional Provisions from Dr. scient. med. Program**

### **§ 9. Transitional Provisions from Dr. scient. med. Program**

Students who are studying under the Dr. scient. med. curriculum (and have not yet completed the program) and have successfully applied for a dissertation topic (in accordance with § 6 para. 2), can have the curricular content of the Dr. sci. med. program as well as the work on the dissertation, provided the topic covers the same sub-discipline of the PhD topic, accredited towards the PhD Program.

## **Jurisdiction and Rules of Procedure**

### **§ 10. Jurisdiction and Rules of Procedure**

(1) Appeals against decisions of the Study rector may be made to the Senate (§ 25 para. 1 Line 12 Universities Act 2002).

(2) The Dean shall decide in study matters in the name of the Study rector to the extent this is provided in the curriculum. If a written decision is requested, this is to be issued by the Study rector.

(3) The General Administrative Procedure Act 1991, Austrian Federal Law Gazette No. 51/1991 as amended shall apply for official proceedings on the basis of this curriculum.

## **Effective Date of the Curriculum**

### **§ 11. Effective Date of the Curriculum**

This curriculum shall enter into effect on October 1<sup>st</sup>, 2011.

## **Annex 1:**

### **Educational Goals/Qualification Profile of the PhD Doctoral Program**

The Graduates are qualified

- to independently conduct research on an international level
- to publish the results of their research in publications in internationally recognized journals
- to present and discuss the results of their research at international conferences
- to present the results of their research in an understandable manner to an interested public
- to conduct technical discussions with other scientists in the English language
- to hold didactically prepared lectures (graduate school lectures)

The graduates know and observe the ethical guidelines for research (good scientific practice).