University of Tübingen exam regulations for the study program in Geoecology culminating in an examination for a Master of Science (M.Sc.) degree

- Special Provisions -

In accordance with §§ 19 (1)(2)(9), 32 (3) LGH (GBI. 2005, 1) as amended on 01.04.2014 (GBI. p. 99), the University of Tübingen Senate on 18.06.2015 passed the Special Provisions of these exam regulations for the study program in Geoecology at the University of Tübingen culminating in an examination for a Master of Science (M.Sc.) degree.

Approved by the President and Vice-Chancellor on 26.06.2015.

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§1 Validity of General Provisions

The University of Tübingen exam regulations for the study program in Geoscience, Geoecology and Applied & Environmental Geoscience culminating in an examination for a Master of Science (M.Sc.) degree – General Provisions – as amended are part of these exam regulations, insofar as no other special provisions have been made.

I. Goals, contents and structure of the program

§ 2 Contents and goals, prescribed minimum period for completion, volume, and start date of program

(1) ₁The Master's program is a research-oriented program following on from a Bachelor's degree in the same field. ₂Building upon a broad base of knowledge in Geoscience, Biology, Ecology, Chemistry, Physics and Mathematics from a study program in the Sciences, this program aims at quantitative understanding of the complex interplay of the lithosphere, pedosphere, biosphere, hydrosphere and atmosphere as well as competence in the relevant methods required for successful processing of environmentally relevant scientific problems. ₃Students in this Master of Geoecology program learn to analyze geoecological problems quantitatively in their scientific context, to collect, evaluate and interpret data independently and using appropriate methods - and to use and judge critically international specialist literature in the discipline. ₄The focus is - both broadly and in the Master's thesis - on the quantitative analysis of geoecosystems in order to evaluate and guide changes in their use and/or their rejuvenation.

(2) $_1$ The prescribed minimum period of study in the Geoecology Master's program is set out in § 1 (5) of the General Provisions of these exam regulations. $_2$ A total of 120 credit points must be obtained to successfully complete this M.Sc. degree program. $_3$ The start of the program (winter or summer semester) is set out in the regulations governing admission and enrollment at the University of Tübingen, as amended.

(3) ₁A prerequisite for enrollment in this Master's program is a Bachelor's degree with an aboveaverage grade (at least 2.5 or better) in the subject of Geoecology or another subject in the sciences or engineering. ₂If that Bachelor's degree was not obtained in the subject of Geoecology, there must be a check to ensure that the assessment set out in § 3 can be completed within the regular duration of study. ₃Any further admission requirements are set out in the selection articles for this study program, as amended. ₄The board of examiners will decide on the equivalency of a degree. ₅The board of examiners may transfer this decision revocably to the head of the board. ₆If there is a set number for admission, the statutes may specify that the selection committee formed for the relevant selection process decides instead. ₇The details may be set out in the selection articles.

§ 3 Structure

(1) $_1$ The Master's degree program in Geoecology is structured as a two-year program. $_2$ It concludes with the Master's examination.

Semester	Module no.	Module description	ECTS credits
Compulsory		Geoecology Master's program	
2	M 101	Wissenschaftliches Arbeiten 1	6
3	M 102	Wissenschaftliches Arbeiten 2	6
4	M 103	Wissenschaftliches Präsentieren	6
3, 4	M 104	Master's thesis	30

(2) Students complete a program of 120 credit points. The program consists of the following modules:

(3) ₁Students must obtain 18 ECTS credits from compulsory modules as well as completing a Master's thesis of 30 ECTS credit points. ₂At least ten days fieldwork must be documented before completion of the degree. ₃Five days of fieldwork from a previous Bachelor's program

may be counted towards the total of ten days. ₄Five days of fieldwork must be carried out during the Master's program. ₅Days of fieldwork carried out as part of modules in the Master's program may be counted.

(4) ₁Students must earn 72 ECTS credits from required elective modules. ₂They include studying an integrative module of at least six ECTS credits from the syllabus of the Geoecology Master's program, twelve ECTS credits from classes offered in "Naturwissenschaftliche Geowissenschaften," twelve ECTS credits from classes in the area of Organismic Biology, and further freely-chosen modules offered by the Geoecology Master's program to a total of 42 ECTS credits. ₃Within this module a maximum of twelve credits may be recognized for classes in non-science areas and a maximum of 30 credits for excursion-type teaching units. ₄The workload in excursion-type teaching units must consist of at least 50 percent excursions or fieldwork. ₅Details of required electives in Geoscience- or Biology-related subjects may be found in the current module handbook. ₆Other modules from the field of geoscientific disciplines may be admitted as required electives upon application; the head of the examination board will decide. ₇However, a maximum of two modules from Bachelor programs is permitted - and then only the modules which the student did not yet complete in the course of a Bachelor program leading up to the Master's program.

II. Teaching of material

§ 4 Types of classes within the modules

1Classes of the following types in particular are scheduled:

- 1. Lectures
- 2. Seminars and colloquia
- 3. Exercises and practical experience, lab work
- 4. Fieldwork, internships and excursions
- 5. Tutorials

₂For classes which are not lectures, participant numbers may be limited under § 30(5)(1) Landeshochschulgesetz if training could not otherwise be guaranteed in accordance with the regulations or if a limitation is necessary for other reasons of research, teaching or patient care. ₃Subject-related techniques in particular are to be taught in these classes along with interdisciplinary, professionally-oriented qualifications. ₄In addition, students are to have the opportunity to work in small groups to develop the ability to present the knowledge obtained both verbally and in written form. ₅In addition, the right to participate in classes may be restricted or admission to part of the course may be made dependent on the completion of certain coursework, if training could not otherwise be guaranteed in accordance with the regulations or a limitation is necessary for other reasons of research, teaching or patient care.

§ 5 Languages of instruction and examination

(1) ₁An adequate knowledge of English is required (level B2 of the Common European Framework of Reference for Languages). ₂Classes and exams may be conducted in German or English. ₃Exams are usually conducted in the language in which the relevant classes were held.

(2) ₁Applicants without sufficient knowledge of the German language may be admitted if they are native speakers of English, have completed a degree at an English-language school or university or in an English-language study program, or can show an internationally-recognized test result of English language knowledge which is the equivalent of the "Test of English as a Foreign Language" with a minimum score of 213 in the computer-based test or 79 in the internet-based test. ₂In this case the degree may be obtained in the parts of the program which are offered in English. ₃Exams in modules conducted in English shall in this case be conducted in English; similarly, the Master's thesis may be written in English.

§ 6 Types of assessment

The assessed coursework required in each of the modules is set out in § 3 of the Special Provisions of these exam regulations and/or in the module handbook.

III. Organization of program

§ 7 Volume of material

The required volume of study is set out in the General Provisions of the exam regulations, the structure of the program and the modules - particularly from § 3 of the Special Provisions of the exam regulations and/or the module handbook.

IV. Master's examination and overall grade

§ 8 Nature and execution of Master's examination

¹In addition to the prerequisites set out in the General Provisions of these exam regulations, a prerequisite for admission to the Master's thesis process and other possible oral examinations to be completed in the final phase of the program under § 15 of the General Provisions is the completion of course-related assessment of 54 ECTS credits. ₂Of these 54 ECTS credit points, six must be earned in the compulsory module Wissenschaftliches Arbeiten 1. ₃Furthermore, for admission to the Master's thesis process, six credit points must be obtained during the Master's program or preceding Bachelor's degree program from each of the following areas:

- 1. Mathematics (6 credits) or Physics (6 credits),
- 2. Chemistry (6 credits),
- 3. Soil Science (6 credits),
- 4. Geology (6 credits),
- 5. Organismic Biology (6 credits) and
- 6. Ecology (6 credits) or Ecosystems Management (6 credits).

⁴Admission to the Master's thesis is allowed at the start of the second year of study at the earliest.

§ 9 Master's thesis

Provisions governing the Master's thesis are set out in § 17 of the General Provisions of these exam regulations.

(2) Evaluation of a Master's thesis in the Master of Geoecology program is to be carried out by an examiner from the Geoscience Department and an examiner from the Department of Biology.

§ 10 Calculation of the Master's overall grade

The overall grade of the Master's examination is calculated from the average (as weighted by credit points) of all grades given in the graded modules, taking account of the further provisions in § 21 of the General Provisions of these exam regulations.

V. Closing remarks

§ 11 Effective date and transitional arrangements

 $_1$ These exam regulations come into effect on the date of their publication in the University of Tübingen's official bulletin, the Amtliche Bekanntmachungen. $_2$ Their first semester of validity is the winter semester 2015/16. $_3$ Students who have commenced their Master's program prior to the semester named above may complete their Master's examination at the University of Tübingen under the new exam regulations upon written application. This application must reach the relevant examinations office in line with § 16(1)(1) of the General Provisions of these exam regulations. $_4$ If no application is made according to to (3), the provisions of the previous exam regulations apply. $_5$ Coursework and assessment completed to date will be accredited according to those exam regulations. $_6$ Coursework and assessment completed to date may be accredited according to these exam regulations. $_7$ These exam regulations do not grant any additional right to be examined; fails in assessed work under the previous exam regulations will be included.

Tübingen, 26.06.2015

Professor Dr. Bernd Engler President