

Study regulations
of the Faculty of Biological Sciences
for the master's programme Evolution, Ecology and Systematics (MSc)

The translation is for information only; legally binding is only the German original:

(*Verkündungsblatt* 09/2010, p. 562);
(first modification *Verkündungsblatt* 06/2012, pp. 222);
(second modification *Verkündungsblatt* No. 03/2014, pp. 124);
(third modification *Verkündungsblatt* No. 02/2015, pp. 29);
(fourth modification *Verkündungsblatt* No. 02/2016, pp. 77);
(fifth modification *Verkündungsblatt* No. 04/2017, pp. 50);
(sixth modification *Verkündungsblatt* No. 03/2018, pp. 121)

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Article 1

§ 1

Scope and application

Based on the corresponding Examination Regulations in their applicable version, these Study Regulations establish objectives, content, and structure of the research-oriented, consecutive study programme 'Evolution, Ecology and Systematics' leading to a Master of Science degree (abbreviation: MSc).

§ 2

Admission requirements

(1) Admission to this study programme takes place for each winter semester.

(2) Prerequisite for the admission to the master's programme Evolution, Ecology and Systematics (EES) is proof of a first university degree from the Friedrich-Schiller- University Jena or another university or institution of higher education of equivalent status in Germany or abroad in a study programme of at least 3 years in the fields of biology or related field of natural sciences leading to a German degree Bachelor of Science (BSc) or to an equivalent undergraduate degree qualifying the graduate to work in their profession.

For degrees earned outside the area of application of the German Basic Law, equivalence will be assessed taking into account equivalence agreements (*Äquivalenzvereinbarungen*) and cooperation agreements by the Examinations Committee.

Equivalence is normally declared if the degree is equivalent to the level of education at an institution of higher education within the area of application of the German Basic Law.

(3) Admission to the study programme presumes applicants to have the necessary professional qualifications and competences. This means the applicants must prove good or very good subjects-specific achievements in their completed examinations in subjects, for example: ecology, zoology, botany, microbiology, and evolutionary biology.

(4) To be admitted to this master's programme, students of an undergraduate programme in biology (2) leading to a first degree qualifying them to work in their profession must have an overall final grade of 2.7 or better (according to the German grading system). Applicants from a different field of study and applicants whose final overall grade is less than 2.7 (according to the German grading system) but who meet all other admission requirements may be admitted to the study programme if their application illustrates particular aptitude for the master's programme Evolution, Ecology and Systematics. To prove particular aptitude, a letter of motivation, a curriculum vitae, proof of previous practical experiences, and the practical orientation of the training must be admitted with the application, and professional and personal commitment must be shown. The decision is made by the Examinations Committee of the master's programme Evolution, Ecology and Systematics. In cases of doubt, selection interviews may be held. In exceptional cases, provisional admission under the condition that certain qualifications must subsequently be acquired is possible.

(5) Proficiency in English is essential and is expected from all applicants.

(6) Together with the application, the following supporting documents must be submitted:

a) Pursuant to §2°(1) above, proof of completion of a first university degree qualifying the applicants to work in their profession or proof of their achievements and performance at the time of the application (including proof to have earned at least 120 credit points in the study programme qualifying the applicant for the present master's programme) or equivalent

qualifications).

b) Pursuant to § 2 (2): proof of the successful completion of courses relevant to the study programme (or equivalent achievements in another field of study).

c) Pursuant to § 2°(4): motivation letter explaining the reasons for applying to this specific study programme.

d) A detailed curriculum vitae including additional achievements and performance relevant to the field of study.

e) Secondary school leaving certificate.

f) if applicable, proof of relevant work experience.

§ 3

Duration of study

(1) The standard duration of study is two years, including the time for writing a master's thesis.

(2) For part-time students, the standard duration of study is four years. Admission to part-time studies requires approval by the Faculty of Biological Sciences.

§ 4

Beginning of study programme

The master's programme 'Evolution, Ecology and Systematics' begins in the winter semester.

§ 5

Objectives of the study programme

(1) Building on the knowledge of biological systems that have been acquired in a bachelor's programme, the objective of the master's programme 'Evolution, Ecology and Systematics' is to expand knowledge about current questions and issues of organisms and evolutionary biology on each integration level, and to review scientific findings critically. Deliberately, the study programme has an interdisciplinary approach, so that students are able to acquire competences in ecology, diversity (incl. knowledge of species), evolutionary biology, palaeontology, systematics, and phylogenetics on different organization levels as well as different classes of organisms. This includes knowledge of methods in statistics. Graduates will be equipped for scientific work in highly relevant professions of organismal biology. Graduates will be able to undertake scientific work at institutions of higher education inside and outside of the university, museums, at public authorities, organizations, and in the private sector.

(2) The master's programme features a large proportion of independent work in seminars and practical courses. A broad range of required elective modules enables either a profound knowledge in all of the above-mentioned subjects or allows for an area of specialization. Amongst the key skills taught are the independent conceptualization and execution of scientific studies as well as the written and oral presentation and documentation of scientific findings (notably in English).

(3) The experimental approach of the study programme is designed to be consecutive and research-oriented, and will lead to a second university degree qualifying graduates to work in

their profession. In addition to subject-specific scientific techniques and skills, graduates will have acquired the communication skills necessary to publicly present the results of scientific research. The option to study abroad for one semester offers candidates the opportunity to gain international experience. The Masters programme qualifies graduates particularly for an academic career and is a prerequisite for subsequently pursuing a doctoral degree in the areas of zoology, botany, systematics, ecology, evolutionary biology, and functional biodiversity research at the Friedrich Schiller University Jena or other universities in Germany or abroad. Graduates will be equipped for scientific work in highly relevant professions of organismal biology.

§ 6

Structure of the study programme

(1) The study programme is composed of modules. Individual modules may be comprised of various combinations of lectures, seminars, practical courses, internships, field work, excursions, project work, tutorials, labs, colloquia, independent study times, and examinations. Each module is a learning and examination unit. One single module normally takes one or two semesters.

(2) To successfully complete the study programme, students must acquire a total of 120 credit points according to the *European Credits Transfer and Accumulation System* (ECTS). Per year of study, a total of 60 ECTS has to be earned.

(3) It is possible and desired to credit ECTS earned during a stay at a university abroad. The second and third semester are particularly recommended for such a stay abroad. The Examinations Committee in cooperation with the staff person responsible for a module decides on the equivalence of assessed and non-assessed coursework and examinations. Students must provide the necessary documentation and proof.

(4) The study programme concludes with submitting a master's thesis. By independently writing this scientific paper, the candidates prove that they are able to work independently on a problem or question from a subfield of the study programme using scientific methods.

§ 7

Scope and content of the study programme

(1) The modules of the first year of study bring together previously acquired skills and knowledge, prepare students for independent work on projects and devise problem-solving strategies and to present scientific findings. In the first year of study, students have to attend five generic basic modules (compulsory) earning a total of 30 ECTS:

- C1 Research on Evolution (5 ECTS)
- C2 Ecology and Diversity (5 ECTS)
- C3 Knowledge of Species (10 ECTS)
- C4 Planning of Experiments and Analysis Biological Data (5 ECTS)
- C5 Major Excursion EES (5 ECTS)

In addition, advanced modules (required elective modules), earning a total of 30 ECTS from the following subjects: evolution, biodiversity, morphology, developmental biology, palaeobiology, phylogeny und phylogenetics, ecology, geobotany, and population, and

evolutionary genetics—all have to be chosen within the first three semesters. Detailed information on the modules currently offered can be found in the module catalogue for the master's programme 'Evolution, Ecology and Systematics'.

Modules from other master's programme related to biology or earth sciences may be recognized and credited upon review by the Examinations Committee.

(2) In the first year of study in the summer semester students may undertake independent scientific work as part of a project module (30 ECTS) already. The master's thesis shall be written in the fourth semester (30 ECTS).

(3) Information on the structure of the individual modules and the ECTS for each module can be found in the module descriptions and the study plan in the module catalogue. Module descriptions also include information on the person responsible for the respective module, the requirements for participation, the workload to be expected, information about content and methods for teaching, learning and working, as well as the type of examination and examination requirements.

§ 8

International mobility of students

(1) To complement studies at the Friedrich Schiller University Jena, a study-related stay abroad may make sense. Academic achievements produced during a study-related stay abroad are recognized and credited if equivalence can be ascertained. This also applies if leave of absence was granted to the student concerned for the stay abroad. By signing an agreement on the courses to be taken (*Learning Agreement*), binding agreements may be concluded in advance regarding the subsequent recognition of achievements.

(2) Different starting and ending dates of semesters at universities abroad may lead to overlaps with examination dates at the home university. Upon formal request, the Examinations Committee in these cases facilitates individual arrangements for taking affected module examinations at an appropriate time.

§ 9

Assessed and non-assessed coursework and examinations

(1) The type and scope of assessed and non-assessed coursework and examinations as well as the respective requirements are defined in the module descriptions and are announced by the respective teaching staff at the beginning of the module at the latest.

(2) Basic and advanced modules are graded pursuant to § 9 (11) of the Examination Regulations, and, pursuant to § 14 (5) of the Examination Regulations and through the earned credit points, become part of the weighted final grade.

§ 10

Admission to individual modules

(1) Prerequisites for admission to individual modules are specified in the module descriptions.

Admission to write the master's thesis requires the completion of the project module normally. Exceptions are decided upon by the Examinations Committee.

(2) For individual required elective modules, the number of participants may be limited if this is justified by factual reasons, particularly for reasons of available space or equipment.

§ 11

Subject-specific academic advisory service

(1) Subject-specific academic advisory services are to be offered by mentors from among the academic staff of the respective study programme and provide individual assistance in the planning. The Examinations Committee decides on the appointment of mentors.

(2) Non subject-specific questions and concerns should be addressed to the Study and Examinations Office at the Faculty of Biological Sciences or the Central Academic Advisory Service of the Friedrich Schiller University Jena.

§ 12

Evaluation of courses offered and quality control

(1) The Faculty is committed to constantly modernizing and improving the courses offered. The Examinations Committee regularly evaluates the recommended study plan and the range of modules offered in due consideration of the developments in the specific field, of professional requirements, of the performance of students in examinations, and actual durations of study. The study plan and the module catalogue are updated and published electronically in sufficient time before the beginning of every academic year. Amendments to the module catalogue of the Study and Examination Regulations require a decision by the Faculty Council and approval by the President.

(2) In addition, course evaluations are conducted in cooperation with the biology student representative committee (*Fachschaft*) every semester. The results are discussed with concerned academic staff and analysed by the Examinations Committee. The goal of these evaluations is to optimize courses and to improve the study conditions in the master's programme, particularly regarding acceptance from the students, the content of the study programme and the shortening of study times.

§ 13

Equal opportunity clause

All titles and functions in (the German version of) these Regulations equally refer to men and women.

Article 2

Coming into effect

Modifications to the Study Regulations pursuant to Article 1 of these Modification Regulations come into effect the day after their announcement in the journal of legal notices of the Friedrich Schiller University (*Verkündungsblatt der Friedrich-Schiller-Universität*). They are applicable for students who are enrolled for this master's programme starting in the winter semester 2018/2019.

Jena, February 2018

Prof. Dr Walter Rosenthal

President of the Friedrich Schiller University