Examination Regulations (Rules)  
of the Faculty of Agricultural and Nutritional Sciences  
at Christian-Albrechts-Universität zu Kiel (Kiel University)  
for students of 'Dairy Science'  
leading to a Master of Science degree (M.Sc.)  
of 1 June 2017


Based on Section 52 (1) 1 of the Schleswig-Holstein Higher Education Act (HSG) in the version published on 5 February 2016 (Law and Official Gazette for the Land of Schleswig-Holstein (GVOBl. Schl.-H. p.39), amended by Article 3 of the Act of 10 June 2016 (GVOBl. Schl.-H. p. 342), after a resolution was passed by the Convention of the Faculty of Agricultural and Nutritional Sciences of 18 January 2017, the following Rules were issued:

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Section 1  
Scope of application

(1) In conjunction with the Examination Procedure Regulations of Christian-Albrechts-Universität zu Kiel for students of Bachelor's and Master's Degree Programmes (PVO), these Examination Regulations apply to the single-subject Master's degree programme in Dairy Science at Kiel University.

(2) They apply to  
1. all modules that are exclusively part of the degree programme regulated by these Examination Regulations,  
2. all modules that are part of the degree programme regulated by these Examination Regulations and are simultaneously exported to other degree programmes;
3. all modules that are exclusively part of other degree programmes as exported modules.

(3) Admission to modules offered by other faculties or other institutes of the same faculty and the respective examinations are subject to the examination regulations of the respective faculties or institutes.

**Section 2**

**Objective of the degree programme**

The Master's degree programme in Dairy Science systematically builds on the Bachelor's degree programme in Agricultural Sciences and imparts to students advanced knowledge, skills and scientific methods in the specialist fields of milk production, processing and marketing of dairy products. The degree programme is both theory- and application-oriented and leads to an advanced professional degree qualification to enable employment in a diverse range of professional fields within the above specialist areas. Depending on the specialised focus of the selected compulsory elective modules, the degree programme prepares graduates for occupations in operational management, consulting, the fodder industry, animal husbandry, agricultural technology, environmental consulting and/or the fields of processing, commercialisation, marketing and nutrition in companies operating on a national and international level. Through successful qualification graduates are able to systematically analyse specified tasks and independently apply scientific methods in an efficient and team-based manner. Accordingly, graduates are particularly well-suited for challenging roles in professional practice (management personnel) or as early career researchers (doctoral degree).

**Section 3**

**Academic title**

The student is awarded the degree of Master of Science (M.Sc.) if he or she has obtained at least a final grade of 'sufficient'.

**Section 4**

**Structure of curriculum**

(1) The standard period of study for the Master's degree programme is four semesters. The degree programme encompasses approximately 62 weekly 45-minute teaching units for the duration of one semester of about 12 weeks (Semesterwochenstunden - SWS) and 120 ECTS credits, including 27 ECTS credits for the Master's thesis. The type and scope of courses and lectures in the compulsory modules are listed in the appendix. The examination grades required for the additional modules offered by the faculty under the interdisciplinary compulsory elective section are stated in the module descriptions approved by the Examination Board and the Faculty Convention before the start of the semester, which will be published in an appropriate location. The Examination Board shall decide on exceptions to these rules.

(2) A Master's degree programme comprises modules totalling 93 ECTS credits, in addition to the Master's thesis totalling 27 ECTS credits.

(3) Compulsory elective sections 1 and 2 comprise 30 ECTS credits and may be entirely or partially completed abroad. Selection and recognition of these modules must be approved by the Examination Board.

(4) The modules are divided into the following sections:

- compulsory section - 63 ECTS credits (11 modules)
- compulsory elective section 1 (Catalogue 1) - 18 ECTS credits
• compulsory elective section 2 - 12 ECTS credits

(5) The compulsory elective modules (Catalogue 1) are respectively approved by the Examination Board and Faculty Convention before the start of the semester and published in an appropriate location. The Examination Board shall decide on exceptions to these rules.

(6) In compulsory elective section 2, up to 12 ECTS credits can be selected from the additional options for students of Master's degree programmes offered by the faculty or from the options of degree programmes leading to a Master of Science degree from another faculty within the scope of available capacity or from the options of degree programmes leading to a Master of Science at a foreign university.

Section 5
Academic year

(1) The academic year applies to this degree programme. Courses in odd-numbered semesters are only offered in a winter semester.

(2) Registrations for odd-numbered semesters are only possible for a winter semester, with registrations for even-numbered semesters only possible for a summer semester.

Section 6
Admission to the Master's degree programme

(1) Admission to the Master's degree programme is subject to evidence of a Bachelor's degree (B.Sc.) in Agricultural Sciences or evidence of an equivalent course of study and respective qualification under an associated degree programme, both of which must have been passed with a grade of at least 'good' (2.5) following studies at a German university or college of further education or an equivalent foreign university in the same or an associated subject whose study objectives, as a minimum, are in accordance with with the Bachelor's degree specified under these Examination Regulations. The regular period of study must be at least 3 years.

(2) Additional requirements for admission to the Master’s degree programme are:

1. Fulfilment of subject-specific acceptance criteria, in respect of which the Examination Board will decide. Criteria for admission within the meaning of this are
   a) sufficient accomplishment of fundamental modules in dairy science within the scope of the Bachelor's degree,
   b) sufficient theoretical and practical knowledge in the field of dairy science (milk production, processing and marketing),
   c) relevance of available knowledge in respect of future occupations and development options in the field of dairy science.

2. Evidence of a sufficient command of English in the form of an IELTS/TOEFL test or a comparable examination. More details can be found in the study qualification rules (Studienqualifikationssatzung).

(3) If admission to the Master's degree programme is applied for on the basis of associated degree programmes, admittance may be subject to evidence of existing knowledge of up to 30 ECTS credits from modules of the Bachelor's degree in Agricultural Sciences. The Examination Board will decide in the individual case with regard to post-studies and the requisite number of ECTS credits.
Section 7
Restriction of admission to compulsory or compulsory elective courses

(1) The number of places available for the individual compulsory or compulsory elective courses will be determined by the Faculty Convention at the request of the module coordinator. If more students initially register for the seminars and practical exercises than there are places available, the responsible committee will determine whether the remaining students can be accommodated through other or additional lectures.

(2) If it is not possible to accommodate all the remaining students, the course administrator will select a number of students from those registered for a degree programme in which the course is envisaged as part of the curriculum, who have promptly registered by the date stipulated by the course administrator and who satisfy the conditions of attendance. Preference is to be given to students whose number of semesters would be increased by non-admission. Equally ranked students will be selected by drawing lots. In order to avoid cases of hardship, the module coordinator may deviate from this procedure upon request.

Section 8
Teaching and examination language

Examinations and lectures for the compulsory modules and compulsory elective modules (Catalogue 1) are held in English. The teaching and examination language for compulsory elective modules not listed in Catalogue 1 is specified in the module description.

Section 9
Examination Board

Contrary to Section 3 (2) 1 of the Examination Procedure Regulations (PVO), the Examination Board consists of four members who are university lecturers, one member from the scientific personnel and two members from the student body. The Dean of studies and the study coordinator shall have an advisory vote.

Section 10
Examinations and module grades

(1) The type and number of examinations required for the compulsory modules is provided in the annex. The examination grades required for the compulsory elective modules offered by the faculty for the compulsory elective section are provided in the module descriptions approved by the Examination Board and the Faculty Convention before the start of the semester, which will be published in an appropriate location. The Examination Board shall decide on exceptions to these rules.

(2) Oral examinations (M) and oral presentations (R) are permitted as oral examination performance. The duration of an oral examination must be at least 15 minutes per candidate, but may not exceed 45 minutes.

(3) Written examinations include written tests (K), term papers (H) and protocols (P). The duration of a written examination (K) is usually at least 30 minutes and no longer than 90 minutes. The Examination Board determines exceptions, such as in the case of examinations with a practical section.

(4) A seminar contribution (Sb), consisting of a presentation and a written report, is admissible as a further examination.

(5) If a module examination consists of several examinations, the module grade will be calculated using the weighting of the individual examinations indicated in the annex. Details of the examination weightings for the modules offered by the faculty in the
compulsory elective section will be specified by the Examination Board and the Faculty Convention before the start of the semester and published in an appropriate location.

**Section 11**

Requirements for admission to examinations

(1) If a module encompasses internships, practical exercises or field trips, admission to the examination is subject to regular participation in these courses. A maximum of one course date may be missed without giving reasons for the non-attendance. If, however, other course dates up to a maximum of 20% of all dates are missed for reasons stated under Section 52 (4) HSG, in justified exceptional cases, at the request of the student the module coordinator may specify substitute performance for those parts of the course that were missed.

(2) The following examination prerequisites may be defined as admission requirements for examinations:
- regular attendance of courses in accordance with Section 52 (12) HSG
- a passed oral presentation
Details will be published in a suitable manner by no later than the start of the course.

(3) Modules for which admission to the examination is subject to regular attendance are marked in the appendix. In the case of modules in the interdisciplinary compulsory elective section offered by the faculty for students of Master's degree programmes, courses which require full attendance for admission to the examination are marked in the module description. For all other courses, regular participation is not required for admission to the examinations.

**Section 12**

Master's thesis

(1) Students who have obtained at least 60 ECTS credits in examinations from completed modules may be admitted to a Master's thesis.

(2) The period from when the topic is issued until the Master's thesis is submitted is 26 weeks.

(3) The Master's thesis topic may be handed back only once and only within six weeks of the topic being issued.

(4) Upon application for admission to the Master's thesis, the candidate is to nominate the topic in agreement with the supervisor.

(5) In exceptional cases and with the consent of the Examination Board, the Master's thesis may be prepared at an institution outside the University, provided that appropriate supervision of the candidate is available there. Supervision may also be provided by postdocs working at the supervising facility, who are qualified in accordance with Section 4 of the Examination Procedure Regulations (PVO). In cases of doubt the Examination Board will decide.

(6) The Master's thesis is to be written in English.

(7) Two hard copies of the Master's thesis and additionally one digital copy are to be submitted to the responsible Examination Office in the form prescribed in the Examination Board guidelines.

(8) The Master's thesis is to be assessed by both examiners within six weeks of submission.
Section 13
Passing the Master’s examination and calculating the section grades and final grade

(1) The Master’s examination will be deemed passed if all the requisite compulsory examinations listed in the annex have been passed, a sufficient number of ECTS credits have been earned by passing examinations in the compulsory elective sections 1 and 2, and the Master's thesis has also been passed to acquire the necessary number of ECTS credits.

(2) The calculation of the final grade includes:
   1. the section grades for the compulsory modules and compulsory elective sections 1 and 2, weighted with the ECTS credits allocated to the relevant section. To calculate the section grades, the grades of the completed section modules are weighted with the ECTS credits allocated to the relevant module in question.
   2. the grade for the Master’s thesis with 27 ECTS credits.

(3) The section grades are calculated by taking the highest grades for the modules assigned to the section in question, for which the total ECTS credits must reach the number of ECTS credits required as a minimum for that section. If the ECTS credits for the final module taken into account exceed the total of ECTS credits required for this section, only ECTS credits up to attainment of the total number of ECTS credits required will be taken into account.

Section 14
Entry into force

These rules enter into force on 1 October 2017.

Approval in accordance with Section 52 (1) sentence 1 of the Higher Education Act (HSG) was granted by the University Board of Kiel University in its letter dated 30 May 2017.

Kiel, 1 June 2017

Prof. Dr Joachim Krieter
Dean of the Faculty of Agricultural and Nutritional Sciences,
Kiel University (CAU)
Annex

Programme schedule for the Master's in Dairy Science

Semester 1–2
10 compulsory modules – 60 ECTS credits

<table>
<thead>
<tr>
<th>Period</th>
<th>Module code</th>
<th>Module description</th>
<th>Compulsory</th>
<th>Graded exam</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS</td>
<td>AEF-ds001</td>
<td>Dairy Economics: Production and Processing</td>
<td>X</td>
<td>M75+Sb25</td>
<td>6</td>
</tr>
<tr>
<td>WS</td>
<td>AEF-ds002</td>
<td>Eco-Efficiency of Dairy Systems</td>
<td>X</td>
<td>M</td>
<td>6</td>
</tr>
<tr>
<td>WS</td>
<td>AEF-ds003</td>
<td>Health Management in Dairy Herds</td>
<td>X</td>
<td>M</td>
<td>6</td>
</tr>
<tr>
<td>WS</td>
<td>AEF-ds004</td>
<td>Dairy Processing and Quality</td>
<td>X</td>
<td>K</td>
<td>6</td>
</tr>
<tr>
<td>WS</td>
<td>AEF-ds005</td>
<td>Dairy Cattle Breeding</td>
<td>X</td>
<td>M50+R50</td>
<td>6</td>
</tr>
<tr>
<td>SS</td>
<td>AEF-ds006</td>
<td>Forage Quality and Conservation</td>
<td>X</td>
<td>M75+Sb25</td>
<td>6</td>
</tr>
<tr>
<td>SS</td>
<td>AEF-ds007</td>
<td>Machine Milking</td>
<td>X</td>
<td>M</td>
<td>6</td>
</tr>
<tr>
<td>SS</td>
<td>AEF-ds008</td>
<td>Animal Behaviour and Welfare</td>
<td>X</td>
<td>M</td>
<td>6</td>
</tr>
<tr>
<td>SS</td>
<td>AEF-ds009</td>
<td>Ruminant Nutrition and Biochemistry</td>
<td>X</td>
<td>M</td>
<td>6</td>
</tr>
<tr>
<td>SS</td>
<td>AEF-ds010</td>
<td>Biometrical Planning and Inference</td>
<td>X</td>
<td>M</td>
<td>6</td>
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</table>

Semester 3 (MF)

Compulsory elective section 1 (Catalogue 1) - 18 ECTS credits
Compulsory elective section 2 - 12 ECTS credits

<table>
<thead>
<tr>
<th>Period</th>
<th>Module code</th>
<th>Module description</th>
<th>Compulsory</th>
<th>Graded exam</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS or SS</td>
<td>Modules totalling 18 ECTS credits from Catalogue 1</td>
<td>X</td>
<td>18</td>
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<td></td>
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<tr>
<td>WS or SS</td>
<td>Optional, modules totalling 12 ECTS credits</td>
<td>X</td>
<td>12</td>
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</table>

Semester 4 (MF)

1 compulsory module – 3 ECTS credits
1 Master’s thesis – 27 ECTS credits

<table>
<thead>
<tr>
<th>Period</th>
<th>Module code</th>
<th>Module description</th>
<th>Compulsory</th>
<th>Graded exam</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS or SS</td>
<td>AEF-ds011</td>
<td>Scientific Methods and Standards*Oral Defence of Master's Thesis</td>
<td>X</td>
<td>R</td>
<td>3</td>
</tr>
<tr>
<td>SS</td>
<td></td>
<td>Master's thesis</td>
<td>X</td>
<td>X</td>
<td>27</td>
</tr>
</tbody>
</table>

Key
M= oral examination - R= oral presentation - K= written examination - H= term paper - P= protocol - Sb= seminar contribution (composite examination) * (MF)= mobility window
Appendix
(not part of the Rules)

Types of teaching and number of hours per week during the semester (SWS)

Compulsory module

<table>
<thead>
<tr>
<th>Module code</th>
<th>Module</th>
<th>V</th>
<th>S</th>
<th>Ü</th>
<th>PÜ</th>
<th>E</th>
<th>Compulsory attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEF-ds011</td>
<td>Scientific Methods and Standards*Oral Defence of Master's Thesis</td>
<td>2 SWS</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>AEF-ds001</td>
<td>Dairy Economics: Production and Processing</td>
<td>2 SWS</td>
<td>2 SWS</td>
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<td></td>
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<tr>
<td>AEF-ds002</td>
<td>Eco-Efficiency of Dairy Systems</td>
<td>2 SWS</td>
<td>1 SWS</td>
<td>1 SWS</td>
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<td></td>
</tr>
<tr>
<td>AEF-ds003</td>
<td>Health Management in Dairy Herds</td>
<td>2 SWS</td>
<td>1 SWS</td>
<td>1 SWS</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEF-ds004</td>
<td>Dairy Processing and Quality</td>
<td>4 SWS</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEF-ds005</td>
<td>Dairy Cattle Breeding</td>
<td>2 SWS</td>
<td>2 SWS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEF-ds006</td>
<td>Forage Quality and Conservation</td>
<td>2.3 SWS</td>
<td>0.7 SWS</td>
<td></td>
<td>1 SWS</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>AEF-ds007</td>
<td>Machine Milking</td>
<td>1.7 SWS</td>
<td>1 SWS</td>
<td>1.3 SWS</td>
<td>PÜ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEF-ds008</td>
<td>Animal Behaviour and Welfare</td>
<td>2 SWS</td>
<td>1 SWS</td>
<td>1 SWS</td>
<td>PÜ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEF-ds009</td>
<td>Ruminant Nutrition and Biochemistry</td>
<td>4 SWS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEF-ds010</td>
<td>Biometrical Planning and Inference</td>
<td>3 SWS</td>
<td></td>
<td>1 SWS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key
- V= lecture - S= seminar - Ü= exercise - PÜ= practical exercise - E= field trip
- SWS= hours per week during the semester