

# **Doctoral degree regulations of the Faculty of Mathematics and Natural Sciences at the University of Rostock**

dated 16th September 2010

Based on § 43 (3) in conjunction with § 2 (1) sentence 3 of the State University Law of Mecklenburg-Vorpommern (State University Law – LHG MV) dated 5th July 2002 (GVOBl. M-V page 398), last amended by article 9 of the law dated 17th December 2009 (GVOBl. M-V page 687) and by article 6 of the law dated 17th December 2009 (GVOBl. M-V page 729), the University of Rostock adopts the following Doctoral Degree Regulations of the Faculty of Mathematics and Natural Sciences.

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### Annex 1

Sample for Statement according to § 4 (1), letters g and h

### Annex 2

Dissertation fields at the Faculty of Mathematics and Natural Sciences of the University of Rostock

## **§ 1**

### **Right to award doctoral degrees**

(1) The Council of the Faculty of Mathematics and Natural Sciences (MNF) awards the academic degree of a „Doctor of Natural Sciences“ (*Doctor rerum naturalium*, Dr. rer. nat.).

(2) A dissertation proves an ability of autonomous scientific working in a dissertation field represented at the MNF beyond that proven by a university degree. The fields represented at the faculty are listed in Annex 2.

(3) The academic degree Dr. rer. nat. is awarded on the basis of a scientific thesis (dissertation) and a public scientific colloquium with immanent examination character (§ 11).

(4) The Faculty Council is entitled to award the title of honorary doctorate, *Doctor honoris causa* – Dr. h.c. –, for outstanding scientific achievements. The particulars are set out in § 18.

## **§ 2**

### **Doctoral supervision**

(1) All university lecturers, scientists with habilitation of the faculties and associated institutes as far as they are faculty members who are fully employed at the University of Rostock are authorized to initiate and supervise dissertations. The supervisory relationship can be continued even if the supervisor retires. If the supervisor leaves the University of Rostock but the doctoral candidate remains at the University of Rostock, the supervisory relationship can be continued for a maximum of three more years. In other cases, the faculty council determines, in consultation with the doctoral candidate, the faculty member who will be in charge of the supervision. The supervisor of a dissertation commits to providing an assessment of the submitted dissertation and to contribute to the doctoral committee.

(2) The faculty council is entitled to involve members of other scientific institutions in the doctorate procedure; these can exercise the same rights and duties as the group of persons referred to in paragraph 1, as long as they have the corresponding qualifications mentioned in paragraph 1.

## **§ 3**

### **Admission requirements**

(1) An essential condition for admission to a dissertation is a completed university study course in the field of mathematics and natural sciences, proven by a diploma, Master of Science degree (M.Sc.) or equivalent university degree (e. g. First State Examination for Extended Secondary School teachers for Biosciences, Chemistry, Mathematics or Physics).

(2) No dissertation on the same topic must have been submitted by a doctoral candidate previously or concurrently at any other university.

(3) Particularly qualified graduates of universities of applied sciences may get an admission for dissertation by the faculty council. The application has to be supported by two university lecturers from the Faculty of Mathematics and Natural Sciences. Prior to processing the application in the faculty council, a scientific qualification for the dissertation has to be proven in a documented oral examination in the field of promotion. The oral examination must be conducted by two university lecturers appointed by the dean. Applying and examining university lecturers may be drawn from different scientific disciplines here.

(4) Studies abroad and a foreign university degree will be accepted upon request in the case that these are equivalents to a German university degree under paragraph 1. This equivalence is determined by the faculty council. Equivalency agreements approved by the Standing Conference of the Ministers of Education and Cultural Affairs and the Standing Conference of German Rectors have to be considered here. In the case that the faculty council cannot decide upon equivalency on the basis of these documents, an expert opinion shall be requested from the Central Office for Foreign Education of the Standing Conference of the Ministers of Education and Cultural Affairs. In addition, candidates who have graduated at a university outside the Federal Republic of Germany are generally expected to be able to prove that they have sufficient German language skills.

(5) It is up to the faculty council to grant an exemption from the admission requirements specified in paragraphs 1, 3 and 4 if this is requested by two professors of the institute in charge. This exemption may be made contingent to the fulfilment of requirements. The candidate must be informed of the decision in writing.

(6) The candidate has the right to find out if the aforementioned admission requirements have been met even prior to submitting the dissertation at the faculty council via the dean.

#### **§ 4**

#### **Application for opening dissertation procedures**

(1) A written application for the implementation of the dissertation procedure must be submitted by the candidate to the dean when submitting the dissertation. The application must have the following enclosures:

- a) three copies of the dissertation (additional copies must be provided according to § 8 (5) or § 9 (2) if the dissertation is to be distributed to more than two assessors),
- b) academic curriculum vitae,
- c) graduation certificate in accordance with § 3 (1) (certified copy),
- d) lists of publication and lectures held at conferences,
- e) generally comprehensible summary of the substantial dissertation results, in writing and electronically (about 10 lines, each in English and German),
- f) official certificate of good conduct,

g) declaration that the candidate has written the submitted dissertation autonomously and unassisted and has not used any sources and aids other than stated, with quotations from the used publications duly marked as (see Annex 1 for sample),

h) declaration that no commercial dissertation agency or advisory service was involved. A related instruction has to be confirmed by submitting a statement in accordance with Annex 1.

i) declaration on if and, if applicable, with which results a previous application for a doctorate degree was submitted at the University of Rostock or any other university,

j) written comment from the supervisor on the candidate's admission and proposal of by at least two assessors apart from the supervisors,

k) where applicable, written notice from the supervisor to the dean as set out in § 8 (5). In this case, deviating from letter j, three possible assessors must be suggested, with at least one external assessor among them.

(2) The day when all documents have been submitted in full to the doctorate office shall be regarded as date of application.

(3) The application for implementing the doctorate procedure can be withdrawn by the candidate in writing as long as the doctorate procedure has not been opened. In this case the doctoral thesis shall be deemed to have not been filed.

## **§ 5**

### **Opening the doctorate procedure**

(1) Based on the documents submitted under §4, the dean notes if the admission requirements according to §3 have been met.

(2) In the case that provided information or submitted documents are incomplete, the dean will give notice in writing asking the candidate for completion within a specified period of four weeks. If this term lapses without any action taken, the application for implementing the doctorate procedure shall be rejected by the dean. This must be explained to the candidate when asking him/her to complete his dissertation application.

(3) In the case that conditions under §3 and §4 are met, the faculty council will decide to admit the doctoral candidate, open the procedure and determine the assessors.

(4) Opening will be refused, if

- the field of the dissertation is not represented at the faculty,
- the faculty is not able to provide professionally competent assessors
- the admission requirements for the doctorate under § 3 are not met,
- the documents required according to § 4 are incorrect or
- the candidate has applied without success to the University of Rostock or another university with a doctoral thesis on the same topic.

(5) The decision of the faculty council must be announced to the candidate by the dean in writing without delay. In the case of refusal, the reasons must be stated. The notification shall provide information on legal redress.

## **§ 6 Dissertation**

(1) The doctoral thesis serves as proof of the candidate's scientific qualification. It must be related to a field of dissertation represented at the faculty (see annex 2).

(2) The research results presented in the dissertation must correspond with the current status of the scientific field, indicate an increase in knowledge and consider and reflect the significant national and international literature.

(3) The dissertation shall be written in the German or English language.

(4) The dissertation shall be no longer than 100 pages. Original data and other material that would impair readability but must be presented for documentation or as a matter of evidence can be included as an additional annex. On reasoned request to the faculty council, deviations from this limitation to 100 pages are possible.

(5) The doctoral candidate is entitled to publish results of his/her dissertation prior to its submission. Several works already published or accepted can be submitted as a cumulative dissertation in the case that they are in close temporal and practical connection and, in total, meet the requirements for a dissertation. In this case, an abstract comparable to a scientific review article must precede the publications. It must meet the following criteria:

a) The own results are to be incorporated into the current state of science. Statements have to be supported by quotations.

b) The abstract has to show clearly the connection between publications submitted as a cumulative dissertation.

c) In the case that several authors were involved in the original works, the individual contribution has to be shown explicitly.

d) The abstract of the cumulative dissertation must not exceed 20 text pages.

## **§ 7 Doctorate commissioner and doctorate committee**

(1) For dissertations at the Institutes of Biosciences, Chemistry, Mathematics and Physics, the faculty council provides one professor as doctorate commissioner and one deputy each.

(2) The doctorate committee is appointed by the doctorate commissioner in charge according to paragraph 1. Obligatory members of the doctorate committee are the doctorate commissioner and the assessors. At least five members of the doctorate

commission, the supervisor among them, have to be present for the scientific colloquium.

Deviating from this, in the case of § 8 (5), at least seven members of the doctorate committee should be present at the scientific colloquium, including professors of at least three of the four scientific disciplines of biology, chemistry, mathematics and physics. All habilitated scientists and lecturers of the faculty are entitled to participate in the doctorate committee. The doctorate commissioner may appoint habilitated scientists and lecturers from institutions outside of the faculty as commission members.

(3) The doctorate commissioner presides over the scientific colloquium. He/she may delegate the chair to his/her deputy or another professor of his/her institute and this is obligatory if the doctorate commissioner has been appointed as an assessor.

(4) The work of the doctorate commission is coordinated by the doctorate commissioner of the relevant institute. He/she confirms the date of the scientific colloquium and undertakes all other tasks determined by the doctoral degree regulations on behalf of the faculty council.

## § 8

### Assessment of the dissertation

(1) The dissertation must be assessed by at least two assessors. One of the assessors is the supervisor of the doctoral thesis according to § 2. Only lecturers and habilitated scientists can be appointed as assessors. At least one assessor must be employed full-time at an institute of the faculty or at an associated institute of the University of Rostock or must have worked at the faculty within the last three years. In cases of cumulative dissertations, no assessors apart from the supervisor may be co-authors in a majority of the publications. The faculty board decides on exceptions.

(2) The assessors are requested to accept or refuse the assessor assignments within ten days. The assessment shall be issued and sent within six weeks after acceptance of the commissioner assignment.

(3) The assessment has to indicate if the dissertation meets the requirements applicable for the academic degree of a *Doctor rerum naturalium* and to recommend the dissertation for acceptance or non-acceptance.

(4) The dissertation has to be evaluated by the assessor with one of the following grades:

magna cum laude	(very good)	Mark with graduation: 1,0; 1,3
cum laude	(good)	Mark with graduation: 1,7; 2,0; 2,3
rite	(sufficient)	Mark with graduation: 2,7; 3,0
non sufficit	(insufficient)	Mark: 4.0

(5) 5) If, in the opinion of the supervisor, the dissertation is outstanding and, thus, could receive a final mark of 'summa cum laude', this must be announced to the dean in writing when the procedure is opened. In this case, the faculty council defines at least two assessors in addition to the supervisor, at least one of them external. The assessors are asked to vote on whether the dissertation in hand deserves this particular honour. Further details are elaborated in § 7 (2) and § 13 (3).

(6) The copy of the dissertation handed over to the assessor passes into his ownership.

## **§ 9**

### **Acceptance and evaluation of the dissertation**

- (1) After consulting with the doctorate commissioner, the dean decides on the acceptance or non-acceptance of the dissertation on the basis of the assessments.
- (2) In exceptional cases, additional assessments can be sought by the dean. This must be done in the case that one assessor has evaluated the dissertation as "non sufficit". In this case, this assessment is decisive on the acceptance of the dissertation. The candidate has to submit the required number of dissertation copies.
- (3) A dissertation is considered to be not accepted if two assessors have evaluated it as "non sufficit".
- (4) Requirements for amendments can be imposed for the acceptance of a dissertation if they relate to its composition and layout but not to its scientific content. These requirements are to be recorded and met before the doctorate procedure can be continued. Fulfilment is monitored by the supervisor. She/he forwards the confirmation to the dean with the improved version of the dissertation to enable him/her to continue the procedure.
- (5) The decision on acceptance or non-acceptance of the dissertation and, if applicable, on requirements must be announced to the candidate by the dean in writing without delay. Afterwards, access to the assessments must be granted to the candidate as well as to the members of the doctorate committee. In the case of non-acceptance of the dissertation, the related notice has to include the reasons and information on legal redress must be enclosed.
- (6) The total mark for an accepted dissertation shall be calculated as the arithmetic mean of the individual assessment marks.

## **§ 10**

### **Non accepted dissertations**

- (1) In the case that a dissertation is not accepted, the doctorate procedure shall be concluded unsuccessful.
- (2) Candidates with a non-accepted dissertation may reapply once for a new doctorate procedure at least six months after the decision of non-acceptance with a significantly modified dissertation or a dissertation on a different topic.
- (3) A statement regarding the previous non-acceptance must be included in the application for a new doctorate procedure.
- (4) One copy of the unaccepted dissertation remains enclosed in the dissertation file

## **§ 11**

### **Scientific colloquium**

(1) (1) After the dissertation has been accepted, the doctorate commissioner determines, in agreement with the candidate and the members of the doctorate committee, the date of the scientific colloquium and invites by public posting. The date must be announced to the candidate and the members of the doctorate committee at least seven days in advance.

(2) In this scientific colloquium, the candidate proves by a presentation and subsequent public defence that he/she is able to portray his field of work in a convincing way, to substantiate the scientific results of his/her dissertation theoretically and to dispute differing views adequately. The presentation shall take 30 minutes. The presentation shall present the essential results of the dissertation and respond to the questions posed by the assessments.

(3) The scientific colloquium is held in public. It is conducted in the German or English language. The colloquium takes place in the presence of the doctorate committee. The candidate will be introduced at the beginning of the colloquium. Extracts from the assessments can be read out during the colloquium. In case of doubt, the head of the doctorate committee decides on the admissibility of questions. Marks may only be announced with the prior consent of the candidate

(4) The colloquium lasts a maximum of 90 minutes and touches, based on the topic of the dissertation and the methods used for its processing, the field of dissertation and related research areas.

(5) Minutes on the content and course of the scientific colloquium have to be taken. These minutes are to be confirmed by the chair of the doctorate commission.

(6) In case the candidate does not appear at the colloquium or terminates it for reasons he/she is responsible for, the colloquium is considered to be not passed. In this case, a further proceeding according to § 12 (3) has to take place. The reason given for this withdrawal or absence has to be announced and proven to the doctorate committee in writing without delay. It is up to the doctorate committee to accept the excuse. It may ask for evidence, in particular a medical certificate. In case a ground of excuse has been constituted, a new date for the colloquium will be set according to paragraph 1.

## **§ 12**

### **Evaluation of the scientific colloquium**

(1) After the disputation, the doctorate committee decides on the evaluation (overall mark) of the scientific colloquium in a non-public meeting.

(2) The evaluation shall be made in two sub-marks, one for the presentation and one for the disputation. The evaluation will be made by one of the grades listed in § 8 (4), the graduations stated there included. The final mark for the scientific colloquium is calculated as arithmetic mean of the two single marks.

(3) The evaluation will be announced to the candidate in camera after the end of the doctoral committee's discussion.



(4) In case the scientific colloquium has been evaluated with mark 4.0 it shall be considered as not passed. In this case, it can be repeated, upon request of the candidate, once, within six months. In case the repeated colloquium will not be passed again, the doctorate procedure shall be considered as ended without success.

### § 13

#### Overall mark of the dissertation

(1) After the scientific colloquium, the doctorate committee will determine the overall mark to be recommended to the faculty council. It needs to be confirmed by the faculty council. The head of the doctorate committee announces this recommended overall mark to the candidate after the colloquium. With the candidate's consent, a public announcement can be made by the doctorate committee, publicly announcing the assessment marks as well as the mark of the scientific colloquium.

(2) The proposal for the dissertation mark is calculated as the arithmetic mean of the written dissertation, weighted with factor 2, and the final mark for the scientific colloquium. One of the following marks is recommended for the overall mark for the dissertation:

summa cum laude	(with honours)	[Average 1.0; see paragraph 3]
magna cum laude	(very good)	[Average 1.0 - <1.5]
cum laude	(good)	[Average 1.5 - <2.5]
rite	(sufficient)	[Average $\geq$ 2.5]

(3) The doctorate committee may recommend awarding the dissertation with the mark "summa cum laude" under the following conditions:

1. all assessors of the dissertation have proposed the evaluation "magna cum laude" (1.0) and at least two assessors have proposed the dissertation to be awarded;
2. the scientific colloquium was awarded with „magna cum laude“ (1.0) too;
3. the supervisor has presented a justification for the award;
4. the dissertation was elaborated within a short period of time and
5. outstanding research achievements have to be substantiated by internationally renowned publications in scientific journals.

All voting members of the doctorate committee must inspect the assessments and the dissertation file prior to the beginning of the scientific colloquium. This must be documented. The doctorate committee votes on the proposed award by secret ballot. However, the proposal for an award can only be made to the faculty council if it had been approved with one abstention maximum. The head of the doctorate committee presents the entire procedure to the faculty board who will decide on the award "summa cum laude" by secret ballot. The award shall only be granted if at least a majority of 2/3 of the present faculty council members approves the proposal.

**§ 14**  
**Publication of the dissertation**

The deposit copies regulation of the University of Rostock applies regarding the submission of deposit copies of the dissertation.

**§ 15**  
**Award of the doctorate degree**

(1) Based on the recommendation of the doctorate committee, the faculty council decides on awarding the title of a doctorate with mark and field of dissertation. A written notice confirming the successful completion of the doctorate procedure can be provided to the candidate by the dean, stating the dissertation mark.

(2) After the dissertation mark was confirmed by the faculty board and the specifications on publication of the dissertation according to § 14 were met, a certificate on the award of the doctoral degree will be issued in German language. The dean completes the doctoral procedure by sending or handing over the dissertation certificate. The certificate contains the title of the dissertation, the field of dissertation and the overall mark for the awarded doctorate degree. It will be signed by the dean and marked with the seal of the University of Rostock. The reception of the certificate entitles the candidate to hold the doctoral degree.

**§ 16**  
**Dissertation file**

A formal record has to be made about the course of the doctorate process and the results (dissertation file). It must be signed by the dean and the head of the doctorate committee. The dissertation file can be inspected by the candidate after completion of the doctorate procedure.

**§ 17**  
**Right of objection**

(1) Upon a doctorate committee member's written request, procedural matters have to be presented to the faculty council for decision.

(2) The candidate has the right to appeal a decision that infringes his/her rights within one month after announcement of the decision in writing or for recording at the dean.

(3) The faculty board checks if steps can be taken to remedy the objection. If this is not the case, it will present the objection to the rector for decision. The rector issues a letter of objection. Legal action against this letter of objection can be taken within one month after the claim was delivered to the court of justice in charge.

**§ 18**  
**Honorary doctorate**

(1) In recognition of outstanding scientific achievements in the field of mathematics or natural sciences, the faculty council may decide with a majority of at least three thirds of its members to award the degree of an honorary doctorate of natural sciences (*Doctor honoris causa*, Dr. h. c.). The Academic Senate of the University of Rostock shall be involved here in accordance with the basic order.

(2) The conditions for awarding this degree will be examined by the honorary doctorate committee appointed by the faculty council. It will forward its decision made on the basis of collected assessments to the faculty board.

(3) The dean performs the award of the honorary doctorate in a dignified manner in public faculty event.

## **§ 19**

### **Binational dissertations**

A doctorate procedure can also be prepared and implemented as binational dissertation under joint supervision with a foreign university. The details of the proceeding have to be specified by the University of Rostock and the involved foreign university in a cooperation agreement, stating mainly supervision, examination, marking and doctorate degree certificate as well as stays abroad. The agreement must be approved by the faculty council.

## **§ 20**

### **Revoking of the doctoral degree**

(1) If it turns out that the admission for dissertation was granted on the basis of false information provided by the candidate, that he/she committed or attempted deception or it has been proven that the candidate has infringed the rules of good scientific practice, the faculty council has the right to annul these achievements, to revoke the doctoral degree and to rescind the dissertation certificate provided that it has already been handed over.

(2) The doctorate degree can also be revoked and the dissertation certificate rescinded if the candidate has been found guilty of a deliberate criminal act and used his/her doctorate degree to prepare or commit it. In any case, the revocation of the doctorate degree is handled according to the applicable statutory provisions. The related decision is made by the faculty council.

(3) The person concerned has to be given the opportunity to comment on the situation before the faculty board.

## **§ 21**

### **Transitional provisions**

(1) The doctorate degree regulations shall apply for the first time for candidates who submitted an application for implementing the doctorate procedure according to § 4 after this regulation's entry into force. Up to and including 30<sup>th</sup> September 2011, these candidates can optionally and upon request implement their doctorate procedure also

according to the doctorate degree regulations of the Faculty of Mathematics and Natural Sciences of the University of Rostock dated 26<sup>th</sup> April 2005 (Bulletin BM M-V page 1025), amended by the First Statutes on Amendment of the Doctoral degree regulations dated 29<sup>th</sup> June 2007 (Bulletin BM M-V page 577).

(2) All doctorate procedures started before this doctorate degree regulations entered into force shall be completed according to the doctorate degree regulations of the Faculty of Mathematics and Natural Sciences of the University of Rostock dated 26<sup>th</sup> April 2005 (Bulletin BM M-V page 1025), amended by the First Statutes on Amendment of the Doctoral degree regulations dated 29<sup>th</sup> June 2007 (Bulletin BM M-V page 577).

## **§ 22** **Entry into force**

The doctorate degree regulations on hand enter into force on the day following the publication in the Bulletin of the Ministry of Education, Science and Cultural Affairs of the state Mecklenburg-Vorpommern. At the same time, the doctorate degree regulations of the Faculty of Mathematics and Natural Sciences of the University of Rostock dated 26<sup>th</sup> April 2005 (Bulletin BM M-V page 1025) amended by the First Statutes on Amendment of the Doctorate degree regulations dated 29<sup>th</sup> June 2007 (Bulletin BM M-V page 577) expire.

Issued on the basis of the decision of the Academic Senate of the University of Rostock dated 7<sup>th</sup> July 2010 and the authorization of the rector dated 16<sup>th</sup> September 2010.

Rostock this 16<sup>th</sup> September 2010

The Rector  
Of the University of Rostock  
Prof. Dr. Wolfgang D. Schareck  
Bulletin BM M-V 2011 page 13

**Annex 1**

**Declaration of the doctoral candidate according to § 4 (1) letters g and h  
Of the doctoral degree regulations  
Of the Faculty of Mathematics and Natural Sciences  
of the University of Rostock**

Name

.....

(Name, First name)

Address.....

(Street, Postal code, Place of Residence)

I intend to elaborate a dissertation on the topic

.....

at the Faculty of Mathematics and Natural Sciences at the University of Rostock. My supervisor is Mr/Ms

.....

I, herewith, declare the following:

1. The opportunity for this PhD project was not communicated to me commercially. In particular I have not engaged any organisation that for money seeks supervisors for the drawing up of dissertations or that performs entirely or partially on my behalf the duties incumbent upon me regarding the examinations.
2. I hereby declare under oath that I have completed the work submitted here independently and have composed it without outside assistance. Furthermore, I have not used anything other than the resources and sources stated and where I have taken sections from these works in terms of content or text, I have identified this appropriately.

..... this .....

(Place)

(Signature)

## **Annex 2**

Fields of Dissertation at the Faculty of Mathematics and Natural Sciences, University of Rostock

### Institute of Biosciences

Biochemistry

Didactics of Biology

Biophysics

Botanic

Genetics

Marine Biology

Microbiology

Molecular biology

Ecology

Plant physiology

Animal physiology

Cell biology

Zoology

### Institute of Chemistry

Chemistry

Didactics of Chemistry

### Institute of Mathematics

Mathematics

Didactics of Mathematics

### Institute of Physics

Applied Physics

Atmospheric Physics

Experimental Physics

Didactic of Physics

Physical Oceanography

Theoretical Physics