

Translation from Swedish*

DOCTORAL EDUCATION

FACULTY OF MEDICINE, UMEÅ UNIVERSITY

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* This document has been translated into English. In case of divergence of meaning between the English and Swedish wording of this document, the Swedish wording shall prevail.

INTRODUCTION

The mission of the Faculty of Medicine is to pursue education, doctoral education, and research. The faculty, comprising fourteen departments, is led by a Faculty Board with the ultimate responsibility for doctoral education. The Strategic board for research (FON) and Rådet för utbildning på forskarnivå (RUF), is at the disposal of the Faculty Board. The objective of FON and RUF is to act on behalf of both doctoral students and supervisors, as well as to encourage a creative environment in which doctoral education will thrive. The Dean's office with a director of studies and a faculty officer handles cases and makes decisions in issues delegated by the Faculty Board, such as:

- * Doctoral admissions
- * Follow-up of doctoral students' progress
- * Appointment of the chairman and examining committee for the licentiate seminar
- * Time and place for the public defence

The Dean's office and RUF are also responsible for information on doctoral studies. FON is responsible for the faculty courses at the doctoral level.

Director of studies: Ulrich von Pawel Rammingen, PhD

Faculty officer: Gunilla Mårald

Address: Doctoral studies, Dean's office at the Faculty of Medicine, Umeå University,
901 87 UMEÅ

GOAL OF DOCTORAL EDUCATION

The following goals are defined in the Higher Education Ordinance's degree ordinance (HF, appendix 2) and in the general curriculum for doctoral studies in Medical science.

2.1 Degree of Doctor**Knowledge and understanding**

For a Degree of Doctor the third-cycle student shall:

- demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialised knowledge in a limited area of this field, and
- demonstrate familiarity with the research methodology in general and the methods of the specific field of research in particular.

Competence and skills

For a Degree of Doctor the third-cycle student shall:

- demonstrate the capacity for scholarly analysis and synthesis as well to review and assess new and complex phenomena, issues and situations autonomously and critically
- demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work
- demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research
- demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general
- demonstrate the ability to identify the need for further knowledge and
- demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.

Judgement and approach

For a Degree of Doctor the third-cycle student shall:

- demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics, and
- demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.

For information re: goals for degree of Licentiate, go to

http://www.medfak.umu.se/digitalAssets/133/133208_general-curriculum-lic.pdf

APPLICATION AND ADMISSION TO DOCTORAL EDUCATION

General Information

A person interested in doctoral studies should contact the head of the department, or get in touch directly with scientists at the department for information on research projects and opportunities for doctoral studies.

According to the Higher Education Ordinance (chapt 7, 37 §) a doctoral student position must be advertised on the university's webpage. The time for sending in an application should be 3 weeks. The department's doctoral education group assists the supervisor in choosing the best applicant. The applicant is supposed to present his/her research plan for the group before admission. The head of the department makes the decision that the applicant will get a PhD position on the condition that the director of studies will admit him/her. The dean makes the decision re: admission to doctoral studies towards a licentiate degree.

Doctoral students are admitted to the doctoral programme continuously during the academic year after applying to the Dean's office for acceptance. The university uses the application form "*Application for admission to doctoral education*" including "*Individual study and funding plan with follow-up for doctoral education at Umeå University*". The study plan is set up by the future doctoral student, the supervisors and the examiner.

Before the documents are sent to the Dean's office, the department's doctoral studies group will assess the application re: general and specific admission requirements, research plan, timeframe and financing plan. The head of the department has to recommend admission before the director of studies can make any decision.

Admission to doctoral education is confirmed with a decision of acceptance to doctoral education (admission certificate). The department is responsible for registering the admission information in LADOK (the administrative data registry).

The doctoral student **must** notify the department secretary of completed "accomplishments" (courses, tests, seminars/journal clubs and presentation at conferences etc) on an ongoing basis. The department secretary registers the information in LADOK after verification by the student's examiner. Doctoral students may obtain a printout from LADOK upon request (Studentcentrum/Ladok may also assist).

The Higher Education Ordinance regulates the organization of doctoral studies.
<http://www.uhr.se/Information-in-English/Laws-and-regulations/The-Higher-Education-Ordinance/>

Admission Requirements

The Higher Education Ordinance regulates the requirements for admission to doctoral education; the applicants must fulfil both *general* and *specific requirements* and *been deemed otherwise to possess the abilities required to succeed with their course of study*. To meet the general requirements, students must complete a minimum of 240 credits during undergraduate education, or acquire the equivalent knowledge in some other way.

A person who fulfils the requirements for basic eligibility for admission to postgraduate education, i.e., basic higher education consisting of at least 120 points or equivalent knowledge that has been acquired in another manner within or outside Sweden, will also be considered to have basic eligibility for admission to postgraduate studies, though until no later than the end of June 2015.

Eight semesters of studies must be completed to fulfil the general admission requirement for the medical and dental programmes.

If there are special reasons, the director of studies can admit to doctoral studies before the general admission requirements have been fulfilled. The intended supervisor is responsible for sending in the application for exemption from the general admission requirements. The faculty's director of studies must have made a decision re: the exemption before an application for admission can be sent to the Dean's Office. Please see enclosure 9 for more information.

Special requirements vary by subject/subject area, and these are specified in the subject's study plan for doctoral education and in the general curriculum for doctoral education in Medical science.

Please note that the specific requirements must be fulfilled before admission to doctoral education.

Excerpt from the General curriculum for doctoral education in Medical science:

3.2. Specific admission requirements

In order to be admitted to doctoral education, it is required that the applicant has:

- 1. necessary knowledge from higher education or corresponding education and/or special professional experience that is assessed in relation to the research area.*
- 2. necessary language skills in English, concerning both oral and writing skills. Assessment of these skills are made by having the intended doctoral student present his/her research plan in English for the department's doctoral education group.*

The qualifications of foreign graduates are evaluated by the intended supervisor and the intended examiner at the department where the applicant is to be admitted. *The Swedish Council for Higher Education* can help assess foreign diplomas (www.uhr.se). Final approval must be issued by the head of the department. Certificates confirming approved qualifications as well as certified copies of diplomas must be attached to the application.

Only applicants with fellowships or those who have been granted a student allowance for PhD candidates may be admitted to the doctoral programme. Applicants with other student financing may be admitted if the head of the department and the director of studies judge that financing is ensured throughout the education to allow completion within a maximum of eight years.

The number of doctoral students admitted to doctoral education must be limited to a number that may be offered acceptable terms regarding guidance and study condition in general. No policy has been set limiting the number of students admitted to doctoral education within a subject/subject area concurrently to the Faculty of Medicine in Umeå; instead, each department makes its own decision.

Supervisor

At the time of admission to doctoral education at least 2 supervisors must be appointed, one of whom

will be appointed principal supervisor, while the other(s) become assistant supervisor(s). A student cannot have 2 principal supervisors. The principal supervisor must ensure that the research pursued by the doctoral student follow current ethical standards and that there is adequate financing for the research project.

FUT has decided that, **for doctoral students admitted as of May 1st, 2015, the principal supervisor must be either employed at UmU or be associated with UmU** through employment at one of the four northern county councils. For any questions, please contact director of studies Ulrich von Pawel-Rammingen.

A scientist at the Faculty of Medicine who is an associate professor, or whom an outside expert considers to have the equivalent expertise, may be appointed principal supervisor. Postgraduates who cannot be senior lectures may be appointed, but then the assistant supervisor must have the qualifications of an associate professor or higher. Otherwise it is sufficient if the assistant supervisor has a PhD. The principal supervisor should have a connection to Umeå University. **According to the rules of the university, at least one of the supervisors must have an employment at Umeå University.** At least one of the supervisors must have taken the course organized by Umeå University for supervisors, have been deemed to have the equivalent expertise or pedagogical qualifications from another university (must be evidenced). Both genders should be represented in the team of supervisors.

A scientist/teacher cannot be appointed supervisor for his/her spouse or any other person belonging to his/her family.

The assistant supervisors must support and assist postgraduate students with their dissertations, together with the principal supervisor. Assistant supervisors may be chosen from the department's scientific staff or come from another department. Assistant supervisors, together with the main supervisor and examiner (see page 7) are responsible for the doctoral student's doctoral education.

Together with the principal supervisor, the assistant supervisor will approve 50% seminar ("mittseminarium"), licentiate seminar, or the oral defence of the student's thesis.

It is an advantage if the assistant supervisor has scientific knowledge and skills that complete those of the principal supervisor.

A professor emeritus may be appointed as assistant supervisor but not as a principal supervisor. In cases where a professor emeritus remains as the principal supervisor an assistant supervisor must be appointed.

If the principal supervisor will be unavailable for an extended period of time, e.g., due to illness or extended absence, an alternate supervisor should be appointed. Proposals for alternate supervisors may be submitted by the principal supervisor after consulting the doctoral student. Decisions regarding alternate supervisors are made by the director of studies (form "*Change in information in Application for admission to doctoral education*").

Doctoral students have the right to change supervisors upon request. However, doctoral students do not have the right to change subject areas. Changing supervisors will take place in consultation with the head of the department, and the decision will be made by the director of studies (form "*Change in information in Application for admission to doctoral education*") and it must be registered in LADOK by the department secretary.

The principal supervisor will

- * draw up an individual study plan together with the applicant
- * together with the examiner, ensure that the doctoral student acquires the knowledge specified in the study plan
- * ensure that adequate resources for working with the thesis project are available to the doctoral student at the department
- * facilitate participation by the doctoral student in relevant doctoral courses, seminars and conferences
- * be supportive and encouraging and be available for discussions with the doctoral student
- * ensure that the thesis project progresses at a reasonable rate so the work will be concluded within the stipulated period of time; this is best accomplished through continuous and close contact during the research project
- * decide when the thesis project is ready for public defence. It is primarily the supervisor's responsibility to assess when the dissertation meets the requirements that may be placed on an academic dissertation regarding both quality and scope
- * together with the head of the department, suggests a faculty opponent and members of the examining committee

The principal supervisor usually gets invited to be present when the examining committee meets and participate in deliberations, however he/she has no right to vote.

Examiner

The examiner is appointed in connection with admission to doctoral education. The supervisor and the doctoral student, together with the examiner, will develop a reading list for which the student will be responsible and plan which doctoral courses and other credit giving items the student should take (see the chapter on doctoral courses).

A professor may always be appointed as examiner within his or her field. In those cases where a professor cannot act as an examiner, an associate professor in the subject/subject area may be appointed. The duties of the examiner shall be kept separate from those of the supervisor.

A current list of appointed examiners in the various doctoral education subjects/subject areas can be found through the Dean's office or the secretary at the department.

Evaluation of whether previous education should be regarded as doctoral education is the task of the examiner at the university where approval of prior education is desired.

The examiner assesses whether the applicant has fulfilled the general and specific requirements before admission to doctoral education.

It is the duty of the examiner to ensure through an examination or in some other way, that the doctoral student has acquired the knowledge of the literature course as specified in the individual study plan. In other words, that the student has acquired both depth and width in the subject/subject area. The examiner must also determine which courses may be included in the doctoral education. He/she also decides how many credits an activity can be given.

The examiner takes an active part in the yearly follow-up of the doctoral student and her/his individual study plan and makes sure that a 50% seminar takes place when 50% of the doctoral education has been

completed. It is recommended that the examiner serves as the chairman at the 50% seminar to get the opportunity to assess the progress of the doctoral student.

The examiner should be used as a mediator when problems occur between the doctoral student and the principal supervisor.

The director of studies makes the decisions re: changing examiner during the course of doctoral education (form "*Change in information in application for admission to doctoral studies*").

Reference group/person

According to UmU's regulations, doctoral students admitted after 2014-01-01 must have access to a reference group. **FUT decided during spring semester 2015 that the requirement for access to a reference group shall apply to all doctoral students at the medical faculty regardless of admission date. From ht15, each doctoral student should have a reference person documented in his/her individual study plan.**

Normally, a reference group includes at least 2 of the supervisors and at least one scientifically qualified university teacher without any connection to the doctoral student's research project. At the Faculty of Medicine, the examiner can be part of the reference group as the reference person. At departments that already have a system similar to the reference group system described above, the examiner do not need to be the reference person nor be part of the reference group.

The reference group meets the doctoral student at a formal meeting in connection with following up on the individual study plan, i.e. at least once per year.

Individual study plan for doctoral education

Each doctoral student must have an individual study plan that provides guidelines for his or her doctoral education. The study plan is designed jointly by the applicant, the intended supervisors and the examiner. The individual study plan, which is included in the form for application for admission to doctoral education, must include six main areas:

- * **Literature course**
- * **Doctoral courses**
- * **Research plan for the dissertation field**
- * **Time frame and financing plan**
- * **Forms for supervision**
- * **Individual learning outcomes**

The individual study plan should be revised at least once a year during the course of the education. It is the responsibility of both the supervisor **and** the doctoral student to ensure that the study plan is kept up to date. Major changes such as changing supervisors and thesis field must be submitted in writing to the Dean's office (form "*Change in information in application for admission to doctoral education*") and a decision will then be made by the director of studies.

Literature course

The literature course should include literature within the subject area so that the doctoral student acquires advanced knowledge in the subject in depth as well as breadth. Courses may cover 3-5 standard works as well as specialized literature within the field of the dissertation. Examples of journals or other literature for which the doctoral student could be responsible should be specified as far as is possible. The literature course may be designed as a "reading list". The doctoral student must be able to report

about its contents. Proposals for the literature course are developed jointly by the supervisor, examiner, and the doctoral student.

Doctoral courses and other credit giving activities

The Faculty of Medicine implemented new requirements for doctoral students admitted from January 1st, 2008. Doctoral students shall achieve a knowledge requirement equivalent to a total of 30 ECTS for a degree of Doctor and 15 ECTS for a degree of Licentiate. 30 ECTS will be achieved by compulsory doctoral courses (15 ECTS), other doctoral courses and other credit giving activities. The examiner determines which courses may be approved as doctoral courses within a certain subject/subject area.

The national course in laboratory animal science is compulsory if animals are included in any of the student's sub-projects. The course in research ethics is compulsory for doctoral students admitted from January 2003. Furthermore, it is compulsory for doctoral students accepted from 2006-07-01 to complete the entire introduction block. The faculty presumes that during doctoral studies, the doctoral student will participate in seminars and journal club at the department.

Doctoral students admitted in 2012 and on, still need to have 30 ECTS of doctoral courses and other credit giving activities, but the compulsory doctoral courses have been cut down to 6 ECTS + 1 presentation at a conference, 1.5 ECTS.

The course Introduction to doctoral courses (streamed lectures), 1 ECTS, is compulsory for doctoral students admitted as of 31st of August, 2015, and on.

Research plan for the thesis project

The research plan must be brief and contain the following components (if this template is not appropriate, a research plan may be designed in some other manner):

- * **Project title**
- * **Background:** definition of the area of research and description of previous knowledge within the field
- * **Objective:** what will the work lead to, how is/are the proposed project(s) innovative?
- * **Methods:** which methods will be used, which are available, which new ones will be established
- * **Preliminary results** (if any)

Individual timeframe and financing plan

The individual timeframe and financing plan is developed in cooperation with supervisors, the chairman of the department, and the doctoral student. The plan is signed by the chairman of the department. At clinical departments the timeframe and financing plan must also be approved by the business administrator ("verksamhetschef").

Current rules stipulate that all students accepted for doctoral education may obtain financing according to the following two alternatives.

- I. The applicant may be employed directly with a doctoral fellowship
- II. The applicant has some other form of financing that is guaranteed throughout the education and where the applicant can devote sufficient time to the programme to ensure graduation within four years for doctorate.

If the supervisor's funding plan cannot be met the department will assume responsibility for financing.

For information regarding employment as senior lecturer, grants, fellowship, etc. see the section “Financial aid/Insurance”.

Forms for supervision

The forms for the supervision, e.g. frequency, must be stated in the individual study plan.

Individual learning outcomes

Intended learning outcomes are defined by the Higher Education Ordinance (“Högskoleförordningen”) and these must be broken down by the doctoral student, supervisor and the examiner into more defined learning outcomes specific for each doctoral student. The intended learning outcomes in the Higher Education Ordinance are divided into specific areas - *Knowledge and understanding, Proficiency and aptitude, Ability to assess and approach* – and the doctoral student’s individual learning outcomes should refer to each of these areas. The individual learning outcomes must be written in the faculty’s *Matrix for goal achievement* (for doctoral students admitted as of January 1st, 2016).

The information re: the doctoral student will be administered in a register with limited access. The information that can be referred to the doctoral student will be destroyed after the defence of thesis.

Ethical assessment/permit from IT board

Certain studies require a permit from the so-called “Regionala etikprövningsnämnden” or “Umeå djurförsöksetiska nämnd”. Application for ethical assessment is the responsibility of the principal supervisor, or whoever is in charge of the project. The supervisor has the ultimate responsibility for ensuring that the studies included in the dissertation are reviewed and approved by the ethics committee. Certain studies require a permit from the IT board. It is important for the doctoral student that all permits are available in connection with publication and the public defence of the thesis, since questions regarding the permits may be discussed.

Forms for application for permits from “Regionala etikprövningsnämnden in Umeå” may be ordered from Ingela Engman Sköld, phone +46 (0) 90 786 72 53, <http://www.epn.se>.

Forms and instructions for application for permits from “Umeå djurförsöksetiska nämnd” are available at the webpage of “Jordbruksverket”, <http://www.sjv.se> via länken <http://www2.sjv.se/blanketterochtrycksaker>. Forms: Ansökan - etisk prövning av djurförsök, D174 and Anvisning till blanketten Etisk prövning av djurförsök, D174:1. The forms may also be ordered from the veterinary surgeon of Umeå University Anders Thornell.

Degrees

The doctoral student will earn a licentiate or doctor’s degree. General and specific requirements for admission to doctoral education are the same, regardless of whether the candidate pursues the licentiate or the doctor’s degree. Normally, admission does not take place in two steps. If the student is uncertain whether the goal will be to earn a licentiate or a doctor’s degree, he or she should always plan to earn the PhD. It is always possible to complete the doctoral studies with a licentiate degree.

Dissertation based in more than one department

If the dissertation is to be issued from more than one department, this must be specified in the doctoral registration. A dissertation can be done through several departments. However, the doctoral student can

be registered as a doctoral student only with the main department, and a degree can only be obtained in one subject/subject area.

Problems with the principal supervisor

If the doctoral student experiences communication issues with the principal supervisor, the examiner should be contacted. The doctoral education group and/or the head of the department may also be of assistance. The university has a coordinator for doctoral studies who can help in problematic situations. If the department cannot solve the problem, the director of studies may be contacted.

Suspension of doctoral student

If a doctoral student does not adequately meet his or her obligation in the individual study plan, the Vice-Chancellor will decide that the student no longer is entitled to guidance and other resources for doctoral education. Before such a decision is made, the doctoral student and supervisor will be given the opportunity to make a statement. Before separation the current position must expire.

Deregistration

If a student wishes to deregister from doctoral education, the Dean's office must be informed by sending in a form for deregistration. The director of studies makes a decision re: the deregistration and after that the department will register the deregistration in LADOK.

Cheating and plagiarism

Cheating and plagiarism are not allowed. You can find more information here (see page 2 of the document):
http://www.student.umu.se/digitalAssets/123/123130_06396_bld_fusk-o-plagiat.pdf

DOCTORAL COURSES

The Faculty of Medicine has implemented new requirements for doctoral students admitted from January 1st, 2008. Doctoral students shall achieve a knowledge requirement equivalent to a total of 30 ECTS for a degree of Doctor and 15 ECTS for a degree of Licentiate. 30 ECTS will be achieved by compulsory doctoral courses (15 ECTS), other doctoral courses and other credit giving items. Observe that the introduction course in research ethics is compulsory for doctoral students admitted from 1 January 2003 and the entire introduction block is compulsory for doctoral students admitted from 1 July 2006. Furthermore, **the national course in animal laboratory science is compulsory, if animals are included in any of the student's sub-projects.**

News: Doctoral students who will be admitted during 2012 and on, still need to have 30 ECTS of doctoral courses and other credit giving activities, but the compulsory doctoral courses have been cut down to 6 ECTS and 1 presentation at a conference, 1.5 ECTS.

Note: 15 ECTS of the total 30 ECTS need to be gained through courses.

Other credit giving activities:

- * other doctoral courses, internal and external, give the number of credits that are predetermined for each respective course
- * active participation in the department's seminars and journal clubs, which can give a total of 12 ECTS
- * participation in national/international conferences with a presentation of the doctoral student's results gives 1.5 ECTS per conference, max 6 ECTS total
- * research visit with another research group at another university gives 1.5 ECTS per week, max 6 ECTS total
- * participation in university level pedagogy courses gives 1.5 ECTS per week, max 6 ECTS total

The doctoral courses or areas within which the doctoral student should complete doctoral courses will be seen in the student's individual study plan. Should anything be unclear, the student will consult with the examiner. Courses at other universities in Sweden or abroad may be counted as doctoral courses if approved by the supervisor and examiner. If the doctoral student would like to count a course from another university as one of the compulsory doctoral courses, an application should be sent directly to the course leader (see page 13). Information re: the national course in animal laboratory sciences can be found at this webpage (a CAS for log-in is needed):

<https://cas.umu.se/login?service=https%3A%2F%2Fwww.medfak.umu.se%2Fanstalld%2Fdjurverksamhet%2F>.

For more information, please contact Leif Carlsson. Enclose certificate and curriculum for the course the doctoral student would like to be given credits for.

A certificate for an approved doctoral course does not mean that the course will automatically be counted in doctoral education. *The examiner will determine the courses that may be counted (not for the compulsory doctoral courses, as explained above).*

The doctoral student is also expected to participate in journal club and seminars at the department, as well as to keep up with relevant literature. The faculty presumes that during doctoral education, the doctoral student will participate in at least one international conference and present his/her own research results (for doctoral students admitted in 2012 and on, this activity is mandatory).

Doctoral students teaching on undergraduate courses shall have completed an introductory course in university teaching, or acquired equivalent skills in some other way. See UPCs webpage <http://www.upc.umu.se/utbildning/>. You may contact Mona Fjellström, UPL, for further information.

The faculty's objective is to offer a selection of doctoral courses offering the basic knowledge necessary for pursuing research, knowledge of different methods that will be useful in the thesis project, and providing advanced knowledge within the student's own subject and those adjacent to it.

Course Catalogue

Doctoral courses provided by the Faculty of Medicine at Umeå University are described on the faculty's home page (link is on the page for doctoral education): <http://www.medfak.umu.se/utbildning/utbildning-pa-forskarniva/> from the middle of May. The catalogue provides information about course leaders as well as the extent and content of the courses.

FON is directly responsible for arranging the compulsory courses.

The compulsory block

- 1) Research methodology and philosophy of science, 3 ECTS
Course leader: Klas-Göran Sahlen
- 2) Research ethics, 3 ECTS
Course leader: Rune Dahlqvist

The courses are arranged every academic year. The courses are arranged in English at least once a year.

FON recommends including the compulsory courses early in doctoral education. For doctoral students admitted as of January 1, 2012, the 2 mandatory courses should be completed before the mid-term seminar.

If the doctoral student has not completed the courses, the application for public defence of a thesis must include information on how the equivalent proficiency has been acquired.

Doctoral students admitted in 2012 and on must attain an equivalent of a total of 30 ECTS for a PhD and 15 ECTS for a Licentiate degree. **For a PhD, half (15 ECTS) of the 30 ECTS is to consist of doctoral courses.** The obligatory block consists of 2 doctoral courses, *Research methodology and philosophy of science, 3 ECTS*, and *Research Ethics, 3 ECTS*, and 1 presentation at a national/international conference. **All doctoral students who have research projects involving animals must go through the national course in animal laboratory science and all doctoral students doing clinical human research must do the Good Clinical Practice (GCP) course or the equivalent.** You can find more information re: the animal laboratory science course here: <https://cas.umu.se/login?service=https%3A%2F%2Fwww.medfak.umu.se%2Fanstalld%2Fdjurverksamhet%2F> (requires CAS). A course in statistics is obligatory if statistics has not been a part of previous higher education.

The course *Introduction to doctoral courses* (streamed lectures), 1 ECTS, is compulsory for doctoral students admitted as of 31st of August, 2015, and on.

In the former compulsory block there were 2 additional courses, these courses can also be found in the faculty's course catalogue:

Research methodology with biostatistics, 7.5 ECTS
Course leader: Joacim Rocklöv

Information retrieval and
Publication, application and lecture, 1.5 ECTS (3a+b)
Course leader: Karina Sjögren

Application dates

The deadline for application to autumn doctoral courses is during the spring and during the fall for spring courses. The deadlines will be stated on the web page.

Entry and selection to courses

The doctoral courses are mainly intended for those admitted to doctoral education at the Faculty of Medicine in Umeå. If there is room, openings may be used by doctoral students from other faculties or universities, researchers who have defended their theses, and doctoral students to be.

Application

Information re: application to doctoral courses can be found on the faculty's web page.

Admission

Selection of applicants to the introductory block will be made by the secretariat for the Faculty of Medicine. The course administrator will make decisions regarding the other courses. Applicants must be notified by the course administrator whether or not they have been admitted no later than two weeks before the course begins. Contact the course administrator if there should be any questions.

Ladok/course certificate

As soon as a student has successfully completed a doctoral course and received a course certificate or completed another credit giving item, the department secretary shall register these activities in LADOK. The student is responsible for informing the secretary.

*Please note: Activities that can be registered as Courses in Ladok are doctoral courses taken at Umeå University after admission to doctoral studies. **All** other courses and activities must be registered as credit transfer ("tillgodoräknande"). Maximum 7.5 ECTS may be credited from courses at lower levels. A doctoral student admitted to doctoral studies aiming for a Doctor of Science with a course package of 60 credits (hp) may count a maximum of 15 credits (hp) from the undergraduate and graduate levels.*

The faculty requirement for course curriculum applies to doctoral courses arranged by a department within the Faculty of Medicine. A course without curriculum can give credit transfer if the examiner approves.

FUT has decided that for doctoral students admitted from July 1, 2014, journal club/seminar series and presentation at a conference must be registered as the following example: Journal club and seminar series, 12 ECTS, Presentation at 3 conferences, 4.5 ECTS. The registration should be done right before

the application for defence of thesis is sent to the dean's office. No details re: place or date should be registered in Ladok.

Doctoral courses at other faculties

Doctoral students may participate in doctoral courses arranged by another faculty at Umeå or at another university. A progress bonus will be given to doctoral students who have their 50% seminar ("mittseminarium") during 2014 and in the years to come. The purpose of the progress bonus is to give the doctoral student opportunity to get international scientific experience and to stimulate his/her networking for the future. The bonus may be used for e.g. travels to a conference to present research results and research visits. The trip must be approved by the supervisor and the examiner. The progress bonus will be transferred to the department after the Dean's Office has received a copy of the form Finished 50% seminar certificate. The bonus is currently 15 000 Swedish kronor.

NEWS:

FON decided 2015-11-18 that **the progress bonus will be distributed to the doctoral student only if the time period between the 50% seminar ("mittseminarium") and the planned defence of thesis is at least 18 months. This decision applies to doctoral students who hold the 50% seminar as of July 1, 2016 and on.**

FINANCIAL AID/INSURANCE

The new Higher Education Ordinance stipulates that anyone admitted to doctoral education must have an individual time frame and financing plan.

Doctoral studentship (“Doktorandanställning”)

A prerequisite for obtaining a doctoral studentship is that the candidate is accepted to doctoral education at a university.

The doctoral student's first position is in effect for a maximum of one year. Employment may be renewed for one year at a time, and may never be effective for a longer period than six months after completion of the doctor's degree.

Appointment for doctoral studentships shall be a full-time position. On request from the doctoral student, the position may be part-time, but a minimum of 50 percent of full-time. He/she does not, however, have the right to be on a full-time leave of absence unless there are extenuating circumstances, e.g., illness, military service, offices in unions and student organisations or parental leave.

A doctoral student may be employed as doctoral student for a maximum of eight years. However, the total length of time corresponding to full-time doctoral education concluding with a licentiate degree, the total length of employment may not exceed the length of time corresponding to full-time doctoral education lasting two years. The total period of employment may be extended if there are extenuating circumstances, e.g., illness, military service, offices in unions and student organisations or parental leave. **These circumstances and the time period need to be stated in the individual study plan.**

Doctoral fellows shall mainly concentrate on their own doctoral education. To a limited extent, fellows may carry out duties (teaching and administrative work) while holding the position. Such duties may not cover more than 20% of full working hours before the candidate has earned the PhD. Overtime compensation will not be paid. **Please note that the teaching duties should be stated in the time and funding plan.**

Additional regulations regarding doctoral studentships are stated in the Higher Education Ordinance and in www.Doktorandhandboken.nu.

Doctoral grant (“utbildningsbidrag”)

The university board has decided that no new doctoral grant may be issued from 2015.

Co-financed doctoral studentship

This system has been available at the former school of medicine in Umeå since 1994. Funds for the doctoral grant/doctoral studentship are allocated based on the application from a main supervisor, and the supervisor agrees to finance half of the standard cost of the doctoral studentship.

Joint funding means that the faculty contributes to the funding of the doctoral studentship with 150,000 SEK/years 1 and 2, and 200,000 SEK/year 3 and 4. If the doctoral student is a medical doctor, the faculty contributes 200,000 SEK/years 1 and 2, and 250,000 SEK/years for years 3 and 4. The supervisor undertakes to fund the rest of the costs of the doctoral studentship. **From 2010 the total amount the faculty contributes with has been raised to 1) 1 200 000 SEK for doctoral students with a degree from the medical or dental programme and 2) 1 000 000 SEK for doctoral students with other degrees.**

Pre-reg. house officer research position (PRHO)

In recent years, it has become more common to arrange special pre-registration house officer research positions in our region. The positions mean that research periods of 3-6 months are placed between the medical training components.

Priority for these positions is given to research students who have already completed their theses, but students who have virtually done so, may also be appointed to such positions.

Stipend (“Stipendium”)

The Faculty of Medicine does not accept stipends as main financial support for a doctoral student. Stipends for the so called “sandwichdoktorander” are accepted, since these students have their main financial support from their home countries.

Please note that doctoral education cannot be pursued with stipends intended for the undergraduate studies level. This is called “skuggdoktorand” and is a crime against the law re: income tax (“inkomstskattelagen”).

Decisions on the awarding of stipends are made by the dean of the faculty upon the recommendation of the individual department. Instructions for handling stipends at Umeå University, which came into force 1 Jan. 1997, and were revised on 20th September 2012, may be requested from the department of human resources, “Löneadministration”.

Stipends do not entitle the student to social or insurance benefits that are available with fellowship. Consequently, stipend recipients should review their personal insurance coverage. However, students receiving fellowship from overseas, and their accompanying families, are covered by university insurance.

INSURANCE

From 1 July 2000, the Legal, Financial and Administrative Service Agency (Kammarkollegiet) has held insurance policies on behalf of students and doctoral students at Swedish universities and university colleges.

The insurance applies to students and doctoral students according to the definition in Chapter 1, section 4 of the Higher Education Ordinance, 1993:100. A student is defined as a person who is accepted to, or who is engaged in university studies, while a doctoral student is defined as a student accepted to, and engaged in doctoral education.

The insurance applies to students and doctoral students according to the above definitions, regardless of how the university education or doctoral studies are financed.

The insurance is valid in Sweden. It is valid during the time spent at the university, and during the direct journey between the residence and the place where the university time is spent.

For more information about the insurance, see: <http://www.kammarkollegiet.se>.

Doctoral studentships

Postgraduate students who hold a doctoral studentship are covered by insurance against work-related injuries according to the same rules that apply to State employees.

Activity and funding in Ladok

At the end of each semester, the doctoral student's level of activity and funding is to be reported in Ladok.

FOLLOW-UP OF DOCTORAL STUDENTS

The Faculty of Medicine has the ultimate responsibility for doctoral education at the faculty, while the department(s) where the doctoral student is admitted to doctoral studies is (are) responsible for the individual student's doctoral education. Thus the doctoral student's progress is a responsibility that rests upon the faculty and the department, even if the main responsibility regarding the education itself rests on the principal supervisor. Information on the doctoral student's activities during the current term will twice a year be noted in LADOK by each department.

The director of studies is responsible for following up the doctoral student's progress on behalf of the faculty. Progress is monitored against the individual course plan. The annual check is done by the department after year 1, 2 and 3. The follow-up after year 1 and 3 is done by filling out the form "Individual study and funding plan with follow-up for doctoral education at Umeå University" (section B). The filled out form gets filed at the department. For follow-up after year 2, please see the section below re: 50% seminar below.

According to UmU's regulations, doctoral students admitted after 2014-01-01 must have access to a reference group. The reference group meets the doctoral student at a formal meeting in connection with following up on the individual study plan, i.e. at least once per year. Read more about the reference group in the first chapter.

The departments have to send lists to the dean's office stating which doctoral students have been followed-up during each semester (deadline: 31st of May and 15th of November). The director of studies will ask the departments to send in random samples of the filled out follow-up forms (section B). **Please note that all follow-ups, including the 50% seminar, must be registered in LADOK.**

The director of studies and the dean's office are responsible for following up the progress year 4 by looking into the application for public defence (anhållan om disputation).

The 50% seminar ("mittseminarium") constitutes part of the follow up of doctoral students and is compulsory, assuming that the doctoral student does not complete a licentiate degree. If this is the case, the director of studies and the dean's office will look into the application for defending licentiate thesis.

Unlike the licentiate seminar, responsibility for the 50% seminar is completely that of the department. A certificate confirming that the 50% seminar has been carried out must be submitted to the dean's office along with the statement of the review group. The director of studies looks into these documents and asks for more information if necessary. This makes the dean's office involved in the follow-up after year 2 as well.

Doctoral students may also choose to complete the licentiate degree as a milestone in their doctoral education, and then continue working toward the PhD. The licentiate degree may never comprise a requirement for anyone who wishes to earn a doctor's degree.

50% SEMINAR ("mittseminarium")**General information**

An important aspect of doctoral education is that the doctoral student is given the opportunity to develop the ability to summarise, analyse, present, and discuss research results with other scientists. This takes place continuously throughout the education, but must be carried out under more formal conditions on one occasion before the public defence of the thesis in a 50% seminar. The 50% seminar is scheduled

when the supervisor and the doctoral student feel that the thesis project has progressed about halfway. The 50% seminar is similar to the licentiate seminar, but the formal requirements are not as extensive.

The biggest difference is that **the 50% seminar should place equal emphasis on the work remaining until the public defence of the thesis as on the work that has already been completed.** The aim of the 50% seminar is that the candidate should be given the opportunity to practice summarising, analysing, and presenting results, and discussing these and future planned projects with a group of researchers with knowledge and interest in the field. The head of the department and the supervisor, in consultation with the doctoral student, appoint three reviewers who are knowledgeable in the field for the 50% seminar. Their job is to assess the doctoral student's presentation as well as the project, and the doctoral student's chances of completing the PhD thesis. The 50% seminar is compulsory for doctoral students admitted to doctoral education in subjects at the former school of Medicine as of the autumn term 1997 and later, and students admitted to doctoral education in subjects at the former Faculty of Odontology in the autumn term 1998 and later.

50% seminar guidelines

The doctoral student and the supervisor sign the registration for the 50% seminar (form "*Application for 50% seminar*") and submit it to the head of the department together with a summary of the results achieved, and the plan for the continued thesis project.

- * The supervisor has the ultimate responsibility for the 50% seminar, including arranging an announcement on the faculty home page. Send an e-mail to Anna Lundberg at the faculty office (anna.lundberg@umu.se) and she will display the information on the home page.
- * The head of the department, the principal supervisor, and the doctoral student select a day, time, and location for the 50% seminar together.
- * The head of the department and the principal supervisor appoint reviewers who are knowledgeable in the subject area and experienced in science. One of the reviewers should come from a different department and should be at least a "docent". The reviewers' task is to assess the thesis project including the results achieved, as well as the continued planning of the thesis project.
- * The examiner may serve as the chairman at the 50% seminar to get the opportunity to assess the progress of the doctoral student.
- * The head of the department is responsible for ensuring that no later than two weeks before the seminar, members of the review group are sent copies of:
 - (i) the 50% seminar application
 - (ii) the doctoral student's summary of the results achieved and the continued planning of the thesis project
 - (iii) the doctoral student's individual study plan
 - (iv) information about the date, time, and location of the 50% seminar
- * The review group's statement is submitted to the head of the department no later than two weeks after the seminar. A copy of the statement will be sent immediately to the doctoral student, the supervisor, and the assistant supervisor, if applicable.
- * A copy of the certificate ("Certificate for completed 50% seminar") confirmed by the department and a copy of the review group's statement are to be sent to the dean's office.

Please see the chapter on doctoral courses for information re: the progress bonus.

LICENTIATE DEGREE

General information

Doctoral education at the Faculty of Medicine may be concluded with the licentiate degree (Licentiate in Medicine, Licentiate in Odontology, Licentiate in Philosophy or Licentiate in Engineering). The Licentiate degree can also be a milestone on the path to the PhD. Normally it takes two years of fulltime studies to earn the licentiate degree.

In principle, doctoral education concludes with the PhD, covering 240 ECTS, but a university may decide that doctoral education of at least 120 ECTS may be concluded with the licentiate degree.

The aim of doctoral education is to give the student advanced knowledge in the subject, as well as training in research methods and independent work. The licentiate degree requires approved knowledge of the subject/subject area, as well as an approved scientific thesis, equivalent to studies of at least 60 ECTS.

The Licentiate thesis may comprise two to three sub-projects with a frame text, or it could be a monograph. If the thesis is based on sub-projects, at least one of the projects should be accepted or published in a refereed international journal. If there are any questions re: the thesis, contact the dean's office.

The Licentiate thesis must have an ISBN, please contact the University Library by sending an e-mail to diva@ub.umu.se.

Advance review

Guidelines for the advance review:

1) Application for advance review is made on the form "*Application for permission to defend a licentiate thesis*", which is filled out completely. Please note that the abstract needs to be sent in with the application and note the instructions for submission on the form. Please note that for the application to be processed by the dean's office, it must have arrived at least **20 weeks before the date for the defence**.

2) The director of studies will appoint a reviewing editor for the application.

3) The editor contacts 2 reviewers and is responsible for the correspondence with them. The main supervisor may suggest reviewers and/or state persons who should not be appointed reviewers due to a conflict of interest.

4) The reviewers assess all unpublished manuscripts which will be part of the licentiate thesis (alternatively assess the monograph text) and decide whether it's probable that the manuscripts will be accepted by an international journal with a peer-review system. For the assessment, the reviewers should also take the already published manuscripts into consideration. Each reviewer writes a report and sends it to the editor.

5) RUF will make a decision if a defence of thesis can be recommended. The director of studies appoints the examining committee and the chairman.

Please note that if an external reviewer is appointed, the supervisor has to pay the cost for the advance review, 2 000 SEK.

If the supervisor does not wish to contact an examining committee before the advance review, the first application will not contain suggestions for the faculty opponent and the examining committee. This will prolong the procedure.

Planning

As soon as the licentiate project has advanced sufficiently that a time for the licentiate seminar can be reserved, the supervisor must inform the head of the department. Concurrently the published articles or manuscript (if any) that are to be included in the licentiate thesis should be submitted to the head of the department, as well as any manuscript for the project frame text. If the thesis comprises a monograph, the manuscript must be submitted.

Reserving the date, time, and location for the licentiate seminar

When the licentiate student has fulfilled the formal requirements, it is the responsibility of the supervisor, in consultation with the candidate and the head of the department, to reserve a preliminary location, date, and time for the licentiate seminar.

The licentiate seminar will take place during the academic term (the dean's office may grant dispensation to this in exceptional cases).

The chairman of the licentiate seminar

A PhD at Umeå University may be appointed chairman. The supervisor cannot be appointed chairman; the examiner, on the other hand, may be appointed chairman.

The opponent

The faculty opponent must be an academically qualified person who has previously defended a thesis and should not be from the same department as the doctoral student. The faculty opponent has the right to attend and participate in the examining committee's meeting but not to have a say in the committee's decision.

An internal faculty opponent should not be paid a fee since the assignment is considered a part of a senior lecturer's duties.

An external faculty opponent should be paid a fee of 5 000 SEK. The fee is paid by the supervisor.

The examining committee's composition

- * The committee will comprise three members.
- * It is important that there are no objections to any of the examining committee members. A member of the examining committee may not be currently involved in any research with, or published any work, together with the candidate or the supervisors during the most recent five years.
- * At least one board member must be an associate professor or a professor. The others should have a PhD.
- * Of the examining committee's three members, one board member may come from the same unit in the doctoral student's main department.
- * Main supervisors and assistant supervisors may not be included in the examining committee.
- * Both genders should be represented on the examining committee. If this cannot be fulfilled, a special explanation must be submitted in the application.

The supervisor and/or the head of the department must submit recommendations for members of the examining committee and the chairman of the licentiate seminar in the "Application for defence of licentiate thesis". The examining committee and chairman are appointed by the director of studies. The examining committee will meet immediately after the seminar.

Application for permission to defend a licentiate thesis

The candidate will apply to the dean's office for permission to defend the licentiate thesis. Registration will take place on a special form ("Application for permission to defend the licentiate thesis). **Please note that for the application to be processed it must have arrived at the dean's office at least 12 weeks before the date for the licentiate seminar.**

The application must include:

- * the head of the department's registration of the licentiate thesis
- * the head of the department's proposal to the examining committee
- * the head of the department's proposal to the chairman for the licentiate seminar
- * the principal supervisor's statement on the licentiate thesis
- * brief summary of the licentiate thesis (abstract)
- * list of the sub-projects included in the licentiate thesis (omitted with monograph). Clearly state whether or not the periodical in which the article cited was published has a referee system. Acceptance of articles should be proven by letters from the editor.
- * certificate of approved doctoral courses
- * certificate of approved literature course

The director of studies appoints the examining committee, the faculty opponent and the chairman for the licentiate seminar. A copy of the decision will be sent to the candidate, supervisor, examining committee members, and the chairman of the licentiate seminar. The faculty's handbooks for the chairman, the opponent and the examining committee will also be sent to the persons concerned.

Announcement of the licentiate thesis

The supervisor must ensure that:

- * the licentiate thesis is provided to the members of the examining committee at least two weeks before the licentiate seminar is to take place
- * the licentiate seminar is announced on the faculty home page at least one week before the licentiate seminar is to take place. Send an e-mail to Anna Lundberg at the faculty office (anna.lundberg@umu.se), and he will display the information on the home page
- * a minimum of 20 copies of the licentiate thesis are available at the department at least two weeks before the licentiate seminar.
- * the licentiate thesis "abstract" is sent out to other departments in the subject/subject area in Sweden, as well as to other departments or individual researchers interested in and with knowledge of the field

Licentiate seminar

The chairman opens the licentiate seminar by presenting the title of the licentiate thesis, the name of the candidate, and introducing the faculty opponent and the examining committee members. The chairman then gives the floor to the faculty opponent who starts with a more comprehensive picture of the area of research that is treated in the licentiate thesis and thereby sets the results of the licentiate thesis in a larger context. The doctoral candidate then gives his/her presentation. After this the actual review of the licentiate thesis begins.

This may vary in form and scope, but should mainly be a dialogue between the faculty opponent and respondent. After the faculty opponent's review the examining committee must be given the opportunity to ask questions and present viewpoints. The chairman will adjourn the licentiate seminar. The meeting of the examining committee will follow.

The examining committee meeting

The examining committee will meet directly after the public defence of the licentiate thesis. The faculty opponent and the supervisors may be called in to the meeting. However, they are not entitled to vote. The examining committee appoints a chairman from the group.

The thesis and the defence will be awarded a combined grade, pass or fail. The decision shall reflect the majority opinion among the examining committee members. The committee decides whether the grade is to be justified and if a reservation is to be registered. If the committee is divided in its decision on the grade and if the licentiate thesis is given the grade Fail, the decision must always be justified.

The examining committee chairman is responsible for giving the protocol, as soon as possible, to the administrator at the department. The licentiate candidate must then apply for a diploma.

More information from UB: <http://www.ub.umu.se/publicera/avhandlingar/licentiatavhandling>
Please note that there is no charge for e-publish the licentiate thesis. UB would like to have one copy of the printed licentiate thesis.

PhD/PhD THESIS

General information

Doctoral education at the Faculty of Medicine concludes with the PhD (Doctor of medicine, odontology, philosophy or engineering). The studies for the PhD include a literature portion that is to give breadth and depth, several doctoral courses, and a thesis project. The PhD comprises four years of full-time studies.

PhD Thesis

A doctoral thesis at the Faculty of Medicine must be based on original scientific work where the research increases knowledge in the applicable field.

A doctoral thesis can be a monography or a collection of studies – compilation thesis – around a common theme. Compilation theses are the most common type in the Faculty of Medicine. 2 accepts are needed to receive permission to defend a thesis. The doctoral student needs to be first author of at least 1 publication (this applies only to doctoral students admitted from January 1st, 2010).

A synthesis thesis generally comprises three to five scientific publications, as well as a frame text. These are combined into a book. In the frame text, results included in the work will be analysed, discussed, and summarized. Results that have not been presented in any sub-project, but are relevant to the dissertation, may be included in the frame text. The new results will then be presented so that they can be reviewed in the same manner as the published results.

Copyright

To avoid legal problems with copyright, permission should be obtained from the publisher of each sub-project before printing. This is usually mentioned in the list of the works that are included.

Guidelines for writing the comprehensive summary

Guidelines for writing the comprehensive summary should be in accordance with the provisions of the Copyright Act, any contract between parties, the ethical rules for research, and the requirements that must be laid down in order to achieve scientific quality.

The Copyright Law (1960:729) forbids the use of another person's copyright material. It is forbidden to copy texts and publish them as part of another text without permission. Quoting public documents, is, however, allowed. The term public document refers to a text that has been published for, or by other means disseminated, to the general public. This means that for a manuscript has been submitted for publication, in a journal, and for which the copyright has been transferred to the publisher, the unpublished material may only be quoted, if permission from the publisher has been granted. Quotations may only be made to such an extent that is motivated by the purpose. It is not accepted to quote long sections of text (e.g. several pages) other than in extremely special cases (e.g. when the scientific review determines how the text should be designed/worded). When quoting text, the source must be specifically stated and the quotations must be marked in accordance with accepted norms. This applies to all texts, including one's own, joint publications, and texts written by others.

In order to reproduce a text that has already been published or accepted for publication, e.g. an article that will be included in a thesis, permission from the copyright owner of that text, usually the journal, is required. For other texts (e.g. manuscripts and drafts), for which there are several authors, explicit

permission must be obtained from each author for the use of the text, since use of the text makes it a public document. In the case where part of the text has been published previously, this must be reported upon submission for publication to e.g. a journal. However, this usually results in difficulties in having the manuscript published.

Furthermore, the aspect of quality must be taken into consideration! The comprehensive summary should be an independent work demonstration that the doctoral student has achieved a high scientific competence. It ought to be synthesis of the articles included in the thesis and represent an integrated overview and discussion, a text where the doctoral student ties together contributions, discusses and reaches conclusions on the entire work.

In other words, in the comprehensive summary, it is not possible to simply reuse parts of text from other articles that will be included in the thesis.

ISBN and ISSN

ISBN is an international standard book number that must be printed on the dissertation. The ISBN is obtained from the University Library:

<http://www.ub.umu.se/en/publish/isbn-issn/request-isbn>

ISSN is an international standard serial number that must be printed on the dissertation if it is part of a series. The Faculty Board has decided that dissertations stemming from the former Faculty of Medicine at Umeå will be included in the series UMEÅ UNIVERSITY MEDICAL DISSERTATION New Series, ISSN 0346-6612, and that those stemming from Faculty of Odontology in Umeå will be included in the series UMEÅ UNIVERSITY ODONTOLOGICAL DISSERTATION, ISSN 0345-7532. The ISSN is followed by an individual number in the series that is provided by the faculty administration, tel +46 (0) 90 – 786 71 78.

Like the ISBN, the ISSN with the number in the series and information re: the printing company will be printed on the back of the dissertation title sheet (first page of the book after the binder).

Thesis defence title sheet

Every dissertation that is sent out prior to the public defence will have a thesis defence title sheet attached (entered at the front of the dissertation).

The thesis defence title sheet will include:

- * dissertation title
- * information on permission to defend the dissertation
- * location, weekday, date, and time of the public defence of thesis
- * name of the author (title, if applicable)
- * information on the department(s) from which the dissertation is based
- * it should be stated if the public defence of the thesis will be in a language other than Swedish
- * faculty opponent's name, title, department, faculty, and university should be stated at the bottom of the page

The back of the abstract will include:

- * thesis title
- * author's name
- * ISSN- and ISBN number
- * Summary of the dissertation in English (about 500 words). Summary in the form of an abstract should be available as follows: background, problem(s), results, conclusion(s). It should be designed as an informative, independent unit that can be published in secondary publications without editing. No reference should be made to literature, figures, or tables in the dissertation, since it must be possible to read the abstract without access to the dissertation.

The summary shall include keywords. The number of keywords should not exceed ten.

Layout

Go to the webpage of the University Library for information re: layout,
<http://www.ub.umu.se/publicera/avhandlingar>.

A tip! Don't forget the text on the spine of the book – year, title and name.

Cover

Most theses are in the format S5 (165 x 238 mm). The thesis may be in another format, contact Print & Media or Helen Hed at the University Library. The cover (front) should give information re: title, name of author, possibly a picture or illustration, name of the department and Umeå University. Information re: the responsible publisher of the series (Responsible publisher under Swedish law – the Dean of the faculty...) should be on the cover (back) and only there. More information on <https://www.anstalld.umu.se/kommunikation-och-marknadsforing/grafisk-profil/?ticket=ST-975876-fjU99ef6da774byChmfr-cas.umu.se>.

Printing

Contact Print and Media in an orderly manner and request information regarding printing time. This is particularly important in the spring, when many are defending their theses. Check that all information, e.g., information about day, time and location are included in the document to be printed, as well as information on the ISSN, number in the series, and ISBN. Don't forget the abstract. Changes that are added after submission of the material for the dissertation may cause inconvenient delays.

Edition

Enough copies of the dissertation should be printed to cover:

- * copies to library - 3 copies of the thesis must be delivered to the library
- * copies to the faculty opponent, examining committee, and the thesis defence chairman (5-7 copies)
- * department copies for distribution to other departments/researchers with knowledge and interest in the field (the number to be determined in consultation with the head of the department)
- * the doctoral student's own need (number to be decided in consultation with the head of the department)

Copies to the library

On the date for your thesis posting, submit three printed copies of your dissertation to the library, each with a thesis defence title sheet. If you want a posting ceremony, you need to bring four copies in total. Leave the three copies to library staff in connection with your posting ceremony or in the library information desk. You can also submit them in advance, ask someone leave them for you or send them by mail.

Doctoral students who have CAS log in permission should use the web-based form at: <http://www.diva-portal.org/umu/webform/index.html>.

Doctoral students who do not have CAS permission can get a temporary CAS from the department.

Further information on this can be found on the university library home page:
<http://www.ub.umu.se/publicera/avhandlingar>.

Copies to the department

The head of the department must ensure that the faculty opponent and chairman at the public defence of the thesis, the members of the examining committee, as well as other departments and individual researchers within the field are sent a copy of the thesis as soon as possible (though no later than the nailing date).

Posting of the doctoral thesis

Before your public defence, you must make your thesis publically available through a process called posting. Doctoral theses must be posted at least three weeks before the public defence. As of January 1 2010, electronic posting of doctoral theses is required at Umeå University. Publication in the university publication database DiVA counts as the formal posting of your thesis.

A booking for your thesis posting should be made around the time that you submit your request for public defence, in good time before you wish to do your posting. The posting must be booked with the library as we are required to review your registration before publication.

To book time for posting, please contact UB via e-mail: diva@ub.umu.se

During weekends, summer holidays and the Christmas season you will not be able to post your doctoral thesis.

In unusual circumstances, a reduced posting period may be permitted.

The doctoral candidate should bring the following to the nailing:

- * one copy of his or her dissertation with a loose or attached abstract (thesis defence title sheet)

Posting one's thesis meant to actually nail it on a wall. Though this is no longer mandatory, most doctoral students still choose to hold a posting ceremony to celebrate. Library staff are in charge of the ceremony which is held in the Study Hall at the University Library.

More information from UB: <http://www.ub.umu.se/en/publish/dissertations/posting>

Press release

One of the university's duties is to notify the rest of the world of the research and education at the university. New dissertations have news value and give a good picture of what is taking place at the different departments and at the university as a whole. The faculty's communication officer Daniel Harju, who has been delegated the task of informing the media and others of the new thesis by the information officer, will contact all doctoral candidates.

PUBLIC DEFENCE OF THESIS

There are many steps included in planning and carrying out the public defence of a thesis. Consequently, at an early stage the doctoral student and the supervisor should inform and discuss the different steps with the head of the department, obtain the necessary documents, and contact a suitable faculty opponent.

When is it time to start planning for the public defence of the thesis?

There is no general rule, but when the supervisor and doctoral student feel that the thesis project has come so far that it should be possible to schedule the public defence of the thesis, the chairman of the department is notified.

- 1) A compilation thesis generally consists of 3-5 scientific publications.
- 2) 2 accepts are required. These 2 accepts are to be published in international journals with peer review system.
- 3) The doctoral student has to be first author of at least 1 publication (either an accept or a manuscript). This applies only to doctoral students admitted from January 1st, 2010.

The main rule is that the articles contained in a dissertation should not be used in other dissertations. In case of joint publications with another doctoral student, the doctoral student involved should have contributed to a substantial part that is clearly discernible. If an article is part of more than one dissertation, the doctoral student's part in the article has to be stated by the main supervisor and the doctoral student.

New: Decision from FON re: more requirements for defense of thesis and Degree of Doctor. The decision will apply to doctoral students admitted from July 1st, 2014 and on.

To get a Degree of Doctor at the Faculty of Medicine, the doctoral student must be admitted to doctoral studies at Umeå University, must have met the requirements for course credits, the thesis must originate from the Faculty of Medicine at Umeå University, and the thesis must be defended at a public defense at Umeå University.

"Must originate from the Faculty of Medicine" = all sub-projects in a compilation thesis must have an Umeå University author affiliation. The faculty's director of studies will, after the application for defense of the thesis has been submitted, check the departmental author affiliation.

A doctoral student who has been admitted to Umeå University and pursues the studies at another university or within the position with another employer should spend at least 30 weeks of the doctoral studies at Umeå University to ensure participation in and contribution to the academic environment.

When a doctoral student wishes to defend the thesis after less than 36 months of doctoral studies, the supervisor and the examiner must justify in writing the reasons for an early defense. The supervisor and examiner must also describe in what way the national and individual outcomes have been fulfilled.

Exemptions from certain requirements for dissertation may, after an individual assessment, be granted for a doctoral student who has started his/her doctoral studies at another university and who is admitted

Faculty of Medicine

The Strategic board for research (FON)

Rådet för utbildning på forskarnivå (RUF)

to the Faculty of Medicine, Umeå University, in conjunction with the main supervisor's employment at Umeå University.

Advance review

According to an earlier decision by the Faculty Board, advance review of the dissertation should take place when:

- * the dissertation comprises a monograph
- * only one of the manuscripts included in the dissertation are accepted or published in a refereed international journal.

Advance review will not take place unless one of the manuscripts are accepted or published, or if the doctoral student lacks a first authorship. This applies only to doctoral students admitted from January 1st, 2010.

Please note that from January 1st, 2010, there are new guidelines for the advance review:

1) Application for advance review is made on the form "*Application for public defence of thesis*", which is filled out completely. Please note that the abstract and the review group's statement from the 50% seminar need to be sent in with the application and note the instructions for submission on the form. Please note that for the application to be processed by the dean's office, it must have arrived at the Registrar at least **20 weeks the preliminary date for the defence**.

2) The director of studies will appoint a reviewing editor for the application.

3) The editor contacts 2 reviewers and is responsible for the correspondence with them. The main supervisor may suggest reviewers and/or state persons who should not be appointed reviewers due to a conflict of interest.

4) The reviewers assess all unpublished manuscripts which will be part of the thesis (alternatively assess the monograph text) and decide whether it's probable that the manuscripts will be accepted by an international journal with a peer-review system. For the assessment, the reviewers should also take the already published manuscripts into consideration. Each reviewer writes a report and sends it to the editor.

5) RUF will decide if public defence of the thesis can be recommended. The dean will appoint the faculty opponent, the examining committee and the chairman for the public defence after suggestion of the director of studies.

Please note that if an external reviewer is appointed, the supervisor has to pay the cost for the advance review, 2 000 SEK.

If the supervisor does not wish to contact an faculty opponent and examining committee before the advance review, the application does not have to contain suggestions for the faculty opponent and the examining committee. This option will prolong the procedure.

Reserving the date, time, and location for the public defence of the thesis

When the dissertation meets the formal requirements, or when the certificate of advanced review approving the public defence of the thesis has been obtained, the doctoral student – in consultation with the supervisor – **must reserve the day and time for the public defence of the thesis. A reservation must be made by phone with Gunilla Marald + 46 (0)90-786 71 78. Only one date** may be reserved. This should be done well in advance, since the faculty tries to avoid more than two

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public defences of thesis per day, as far as is possible. The public defence of the thesis should take place during the academic school year. An exemption is only granted in extremely unusual circumstances.

Before reserving the day and time make sure:

- * the day suits the intended faculty opponent
- * the people who will be recommended for the examining committee as well as the chairman of the public defence of the thesis and the supervisor are all available
- * that there is a suitable room available. The room should be reserved well in advance. This is taken care of by the department. This is especially important if the public defence of the thesis is planned for the end of a term when many want to defend their theses.

Registered with the Dean

The doctoral student applies personally in writing to the Dean for the time and location of the public defence of the thesis. **Please note that for the application to be processed it must have arrived at the dean's office at least 8 weeks before the defence.**

Form for application may be obtained from: <http://www.medfak.umu.se/utbildning/utbildning-pa-forskarniva/blanketter/>.

Please note that you need to make a preliminary reservation before you send in the application!

The form should be e-mailed to disputera@diarie.umu.se. The application will be processed by Gunilla Mårald at the dean's office, and should contain

- * the date, time and information on the room reserved by the department for the public defence of the thesis
- * the dissertation title (both in English AND in Swedish!) and the name, title and work address of the faculty opponent

Advance reservations should be made in plenty of time, particularly if the public defence of the thesis is to take place at the beginning or end of the term.

When the application is approved a copy of the decision is sent to the doctoral candidate, UB, the faculty's communicator, and the Registrar. An additional copy of decision is used when the dissertation is nailed.

We recommend that you send in the application to the Dean when the title of the thesis is final, at least 8 weeks before the defence.

Application

The doctoral student applies for permission to defend a dissertation on the form "Application for public defence of thesis", which is sent to the dean's office. **Please note that for the application to be processed it must have arrived at the dean's office at least 12 weeks before the defence.**

NB! It should be made clear that the list of articles included in the thesis have been published in scientific journals using a referee system. Furthermore, a copy of a letter from the editor confirming that the article has been accepted should be attached. **Responsibility for correctness of the material submitted in the application lies upon the head of the department and the supervisor.**

The director of studies will give a suggestion for the decision and the Dean will then appoint the

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committee, the faculty opponent and the chairperson for the defence.

A copy of the Dean's decision will be sent to the candidate, chairman of the department, supervisor, examining committee members, and the opponent of the defence of the thesis. The faculty's handbooks for the chairman, the examining committee and the faculty opponent will be sent to the persons concerned.

The chairman of the public defence of the thesis

A PhD at Umeå University may be appointed chairman. The supervisor cannot be appointed chairman, the examiner, on the other hand, may be appointed chairman.

Faculty opponent

A person who possesses scientific expertise within the field of the dissertation may be appointed as faculty opponent. The faculty opponent should be at least an associate professor.

When choosing the faculty opponent one should strive to find the most skilled researcher in the field. If there is no one appropriate in Sweden the faculty opponent may be selected from another country. The faculty opponent should not be chosen from the doctoral candidate's own faculty. Proposals for the faculty opponent may be submitted by the head of the department after consulting with the supervisor and the doctoral student. Before the proposal for a faculty opponent is submitted, the head of the department must check that the faculty opponent is willing to accept the assignment, and that the reserved date and time are acceptable and that no conflict of interest exists.

Conflict of interest means: co-publishing in the last five years, supervisor/doctoral relation in the last ten years, and other connections of a similar nature, such as joint research project/research grants, professional relationship eg head of department, marriage, close relation or similar. Please note that if a faculty opponent is engaged who is not familiar with the procedures at the Swedish public defence on the thesis it is the responsibility of the head of the department to provide the faculty opponent with adequate information on the requirements and expectations placed by the faculty on a faculty opponent.

When the Dean has appointed the faculty opponent an excerpt from the minutes is sent to the department, the faculty opponent, the examining committee, the chairman, the doctoral student and the supervisor as confirmation. In addition, the faculty's handbooks for the faculty opponent, the examining committee and the chairman are sent to the persons concerned. It is the responsibility of the supervisor to ensure that the faculty opponent and the examining committee learns about the work included in the dissertation as soon as possible, as well as the finished dissertation, no later than three weeks before the public defence.

A fee of SEK 10 000 will be paid to the faculty opponent by the department. The fee has been raised from January 1, 2012.

Examining committee

The requirements and guidelines that are in effect for the composition and obligations of the examining committee members can be found in the Higher Education Ordinance. Proposals for the examining committee are made by the head of the department after consultation with the main supervisor and the examiner, and are submitted on the form "Application for public defence".

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The examining committee's composition

- * The committee will comprise three or five members
- * It is important that there are no objections to any of the examining committee members. Members participating on the examining committee may not be co-authors in any of the works included in the dissertation. In addition, a member of the examining committee may not be currently involved in any research with, or published any work, together with the candidate or supervisors during the most recent five years
- * Committee members must be associate professors or professors. If there are extenuating circumstances a person who has a PhD but is not an associate professor may be selected to participate in the examining committee
- * Of the examining committee's three or five members, **at least one member must come from another university**. This member must not work at the university where the doctoral student will be examined.

- * At least one member must come from the Faculty of Medicine, Umeå University
- * No more than one (or two members in the case of a total number of five) should come from the doctoral student's main department.
- * Main supervisor, assistant supervisors or the examiner may not be included in the examining committee
- * Both genders should be represented on the examining committee. If this cannot be fulfilled, a special explanation must be submitted with the application.

Examining committee's task

The examining committee's task is to review and evaluate the dissertation, as well as its defence. The following points shall be judged:

- * clarity in describing the aim and questions
- * adequate and valid methods
- * relevance, originality, and innovative value
- * adequate discussions and interpretation of the scientific results

If a committee member has questions regarding the dissertation, the doctoral candidate must be permitted to respond to these in connection with the public defence of the thesis. Active participation by the examining committee members in the subsequent discussion is desirable.

Since the examining committee, when examining the thesis and the defence, makes a decision on behalf of the university, the members of the committee should not be paid a fee.

Examining committee meeting

- * The examining committee will meet directly after the public defence of the thesis
- * The chairman of the public defence of the thesis, the faculty opponent and the supervisors may be called in to the examining committee meeting. However, they are not entitled to vote.
- * The examining committee appoints a chairman from the group
- * The thesis and the defence will be awarded a combined mark, pass or fail. The decision shall reflect the majority opinion among the examining committee members. The committee decides whether the grade is to be justified and if a reservation is to be registered.

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- * If the committee is divided in its decision on the grade and if the licentiate thesis is given the grade Fail, the decision must always be justified.

The examining committee chairman is responsible for sending the protocol, as soon as possible, to the administrator at the department. The doctoral candidate must then apply for a diploma.

Changing examining committee members

- * Anyone who accepts the task of serving as a member of the examining committee must have ensured that there are no obstacles to the assignment
- * If a committee member finds that an obstacle has arisen the head of the department must be contacted immediately. The supervisor must submit a new proposal for an examining committee member in writing to dean's office, the Dean will then appoint a new committee member.
- * Should a member of the examining committee be forced to cancel right before the public defence of the thesis the head of the department must contact the Dean immediately.

- * Should a member of the examining committee not be present at the beginning of the defence of the thesis the chairperson at the thesis defence event has the authority to appoint a suitable replacement from the academic representatives present in the auditorium.
Please note that without the external member of the committee, the defence cannot be held.

Conflict of interest

Provisions governing conflicts of interest are set forth in Section 11 of the Administrative law Act (1986:223). A conflict of interest refers to a circumstance, which causes a member of a decision-making body who takes part in a discussion or presents a matter, to lack objectivity in his or her decision. Faculty opponents as well as examining committee members should therefore be entirely independent from the candidate, supervisors and project.

Thesis defence ceremony

The thesis defence ceremony can be held in Swedish or in English. The ceremony is usually introduced by the chairman who presents the doctoral candidate, the title of the dissertation, the faculty opponent, and the examining committee members. The chairman gives the doctoral candidate the opportunity to speak first. At this point the candidate may state any corrections in the dissertation. The chairman then gives the floor to the faculty opponent who starts with a more comprehensive picture of the area of research that is treated in the dissertation and thereby sets the results of the dissertation in a larger context. The doctoral candidate gives his/her presentation.

After this the actual review of the dissertation begins. This may vary in form and scope, but should mainly be a dialogue between the faculty opponent and respondent. After the faculty opponent's review the examining committee and the auditorium must be given the opportunity to ask questions and present viewpoints. Critical viewpoints from the examining committee will be presented during the thesis defence ceremony. The auditorium will be given the opportunity to present viewpoints. There is no maximum time for a public defence of the thesis. The examining committee may decide to take a break during the ceremony if it is lengthy. The chairman adjourns the thesis defence ceremony.

Finance

For defences as of 2013 and on: The budget for dissertation grants has been merged with the budget

for “resultatpremien”. The grant will be transferred to the department within the “resultatpremie”.

Check list for public defence of thesis

- * Is an advance review necessary? If you're unsure, read the section re: Advance review. **If an advance review is necessary, the application should be at the dean's office at least 20 weeks the preliminary date for the defence**
- * Reserve a preliminary date and time for the defence of the thesis with Gunilla Mårald, +46 (0)90-786 71 78
- * Faculty opponent, examining committee and chairperson for the defence
- * Reserve a room for the defence
- * Agreement with Print & Media
- * Application to the Dean for approved day, time and location **(at least 8 weeks before the defence)**
- * Application to the dean's office **(at least 12 weeks before the defence)**
- * Reserve a time for nailing (nailing done in person and/or nailing done electronically) with UB, diva@ub.umu.se. Nailing should be done at least 3 weeks before the day the thesis is defended
- * Obligatory submission of the thesis in electronic form to the library (before nailing)

DIPLOMA

A diploma is issued to candidates who fulfilled all of the requirements of the licentiate or doctor's degree at the Faculty of Medicine in Umeå. "Application for diploma" is submitted by the doctoral student to Umeå University, Studentcentrum/Examina, 901 87 Umeå (<http://www.student.umu.se/english/getting-your-degree/apply-for-your-degree/?languageId=1>). According to decisions of the Vice chancellor, date 20 August 2007:

- * students defending dissertations at the Faculty of Medicine can generally receive the title *Medicine doktor* (please note that *Medicine doktor* is **not** the same as *Doctor of Medicine, MD*, which is a degree for physicians (medical doctors))
- * students who defended dissertations at the Faculty of medicine, after the Faculties of Medicine and Odontology were merged on 1 July 1999, and who have their undergraduate degree from an odontological educational programme can choose the degree titles *Medicine doktor* or *Odontologie doktor*
- * students who defended dissertation at the Faculty of Medicine, and who have their undergraduate degree from a science, engineering, a humanities, or social studies educational programme may choose the degree title *Medicine doktor* or *Teknologie doktor* or *Filosofie doktor*, respectively
Please note that the different titles above only exist in the Swedish language. In English the title is PhD, Doctor of Philosophy.

Requirements for the licentiate degree include

- * the licentiate student must pass the examination on the course and literature portions of the individual study plan
- * the scientific thesis must be approved at the licentiate seminar

Requirements for the doctor's degree include

- * the doctoral student must pass the examination on the course and literature portions of the individual study plan
- * the dissertation must be approved at the public defence of the thesis

Note that the doctor's degree is counted from the date on the diploma, not from the date on which the thesis was defended.

COMMENCEMENT CEREMONY

The candidate who has completed the requirements will be awarded the Doctor's Degree. The three insignia of the doctor that represent the external signs of the doctor's dignity are conferred. Umeå University currently holds commencement ceremonies for doctors every year. Honorary doctor's degrees are conferred on the university's commemoration day in the autumn.

A written invitation is sent to all those who earned or will earn the doctor's degree during the academic year to participate at the ceremony; however, participation is voluntary. **Please note that the doctoral student needs to defend the thesis by the beginning of May, at the latest, to be able to attend the commencement ceremony the same year.** Those who cannot participate the same year are welcome to attend the following year. Below is a brief presentation of the commencement celebration, which has developed into a ceremonial and conclusion to the academic year.

Insignia

The doctor's insignia at the Faculty of Medicine comprise the diploma, the doctor's hat, and the gold ring. The diploma is printed by the university and conferred as a gift from the faculty. The doctor's hat is obligatory at the commencement ceremony. The doctor's hat may be purchased or borrowed. The doctor's gold ring is made in a special model for Umeå that varies with the degree conferred. Wearing the ring is not required. The ring is only conferred symbolically at the ceremony. However, those doctors who intend to by a commencement should take advantage of store discounts.

Commencement ceremony

The commencement ceremony is held at Aula Nordica. Degrees are conferred for each faculty by the deans or someone specially appointed for the occasion. The ceremony is surrounded by music and song. Participants in the ceremony – the new doctors, the dean, those who confer the degrees and the ushers wear long gowns of any colour or tails. There is no dress code for others attending the ceremony.

Commencement dinner

In the evening there is a banquet followed by dancing. The new doctors and their spouses are the guests of the faculty. Other guests may be invited at their own expense. Formal evening dress or sports jackets are required.

Information

For more information please refer to Academic festivals and traditions that is sent to all future doctors, and is available in English. Arrangements at Umeå University are coordinated currently by mistress of ceremonies Charlotte Wiberg.

LIST OF FORMS

Forms may be found on the faculty's website:

<http://www.medfak.umu.se/utbildning/utbildning-pa-forskarniva/blanketter/>

List of forms**Exemption from general admission requirements**

- * Application for exemption from general admission requirements

Application and admission to doctoral education

- * The university application form including individual study and funding plan with follow-up for doctoral education at Umeå University (section A) (12 pages)
Enclosure: Matrix for goal achievement
- * Change in information in application for admission to postgraduate studies (3 pages)

Follow-up

- * The university follow-up form (section B) (7 pages)

Deregistration

- * Form for deregistration (1 page)

Activity/Registration and Financing

- * Form for activity and registration (1 page)
- * Form for financing (3 pages)

50% seminar

- * Application for interim seminar (6 pages)
- * Certificate of completed interim seminar including the review group statement (5 pages)

Doctoral courses

- * Evaluation of doctoral courses (1 page)

The licentiate thesis – seminar

- * Application for defending licentiate thesis (7 pages). Must be sent in electronically to disputera@diarie.umu.se.

PhD thesis – public defence of thesis

- * Form for All courses passed (1 page)
- * Application to the Dean (1 page). Must be sent in electronically to disputera@diarie.umu.se.
- * Application for public defence (9 pages). Must be sent in electronically to disputera@diarie.umu.se.

Diploma

- * Application for diploma/certificate form can be found at <http://www.umu.se/utbildning/efter/examen/blanketter>.

Enclosure 1

DOCTORAL EDUCATION: SUBJECTS

From autumn term 2007, the Faculty of Medicine offers doctoral education at research level in the subject *Medical Science* with an orientation towards xology. However, subjects will remain the same for students registered before autumn 2007, unless the student wishes to reregister to *Medical Science*.

According to the Higher Education Ordinance each doctoral subject must have a study plan. It will include the requirements for admission to doctoral studies in the subject, how doctoral studies are organized, and the requirements for completion of the licentiate or doctor's degree.

You can find the general curriculum for education at research level in the subject of Medical Science in enclosure 2.

Subject areas	Department
Anatomy	Dept of Integrative Medical Biology
Anesthesiology	Dept of Surgical and Perioperative Sciences
Bioinformatics	Dept of Clinical Microbiology
Biomaterials	Dept of Odontology
Biomedical Laboratory Science	Dept of Clinical Microbiology
Care Research	Dept of Nursing
Cardiology	Dept of Public Health and Clinical Medicine
Cariology	Dept of Odontology
Cell Biology	Dept of Integrative Medical Biology
Child- and adolescent psychiatry	Dept of Clinical Sciences
Clinical Bacteriology	Dept of Clinical Microbiology
Clinical Chemistry	Dept of Medical Bioscience
Clinical Immunology	Dept of Clinical Microbiology
Clinical Microbiology	Dept of Clinical Microbiology
Clinical Neurophysiology	Dept of Pharmacology and Clinical Neuroscience
Clinical Oral Physiology	Dept of Odontology
Clinical Pharmacology	Dept of Pharmacology and Clinical Neuroscience
Clinical Physiology	Dept of Surgical and Perioperative Sciences
Clinical Radiology	Dept of Radiation Sciences
Cognitive Neuroscience	Dept of Integrative Medicine Biology
Dermatology and Venereology	Dept of Public Health and Clinical Medicine
Endodontia	Dept of Odontology
Epidemiology and Public Health Sciences	Dept of Public Health and Clinical Medicine
Family medicine	Dept of Public Health and Clinical Medicine
Family medicine and Epidemiology	Dept of Public Health and Clinical Medicine
Forensic Medicine	Dept of Community Medicine and Rehabilitation
Gastroenterology	Dept of Public Health and Clinical Medicine
Geriatrics	Dept of Community Medicine and Rehabilitation
Global Health	Dept of Public Health and Clinical Medicine
Gynaecologic Oncology	Dept of Radiation Sciences
Hand Surgery	Dept of Surgical and Perioperative Sciences
Hematology	Dept of Radiation Sciences
Histology with Cell Biology	Dept of Integrative Medical Biology
Immunology	Dept of Clinical Microbiology
Infectious Diseases	Dept of Clinical Microbiology
Logopedics	Dept of Clinical Sciences

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Maxillofacial Surgery	Dept of Odontology
Medicine	Dept of Public Health and Clinical Medicine
Medical Biochemistry	Dept of Medical Biochemistry and Biophysics
Medical Biophysics	Dept of Medical Biochemistry and Biophysics
Medical Genetics	Dept of Medical Biosciences
Medical Psychology	Dept of Clinical Sciences
Medical Technology	Dept of Radiation Sciences
Molecular Biology	Dept of Molecular Biology
Molecular Medicine	UCMM
Neurology	Dept of Pharmacology and Clinical Neuroscience
Neurosurgery	Dept of Pharmacology and Clinical Neuroscience
Nuclear Medicine	Dept of Radiation Sciences
Obstetrics and Gynecology	Dept of Clinical Sciences
Occupational and Environmental Medicine	Dept of Public Health and Clinical Medicine
Occupational Therapy	Dept of Community Medicine and Rehabilitation
Oncology	Dept of Radiation Sciences
Ophtalmology	Dept of Clinical Sciences
Oral Cell Biology	Dept of Odontology
Oral Diagnostic Radiology	Dept of Odontology
Oral Health	Dept of Odontology
Oral Medicine	Dept of Odontology
Oral Microbiology	Dept of Odontology
Orthodontia	Dept of Odontology
Orthopaedics	Dept of Surgical and Perioperative Sciences
Otorhinolaryngology	Dept of Clinical Sciences
Pathology	Dept of Medical Biosciences
Pediatrics	Dept of Clinical Sciences
Pediatric Dentistry	Dept of Odontology
Periodontology	Dept of Odontology
Pharmacology	Dept of Pharmacology and Clinical Neuroscience
Physical Therapy	Dept of Community Medicine and Rehabilitation
Physiological Chemistry	Dept of Medical Biosciences
Physiology	Dept of Integrative Medical Biology
Plastic Surgery	Dept of Surgical and Perioperative Sciences
Professional development	Dept of Clinical Sciences
Prosthetics	Dept of Odontology
Psychiatric epidemiology	Dept of Clinical Sciences
Psychiatry	Dept of Clinical Sciences
Public Health	Dept of Public Health and Clinical Medicine
Pulmonary Medicine	Dept of Public Health and Clinical Medicine
Radiography	Dept of Nursing
Rehabilitation Medicine	Dept of Community Medicine and Rehabilitation
Rheumatology	Dept of Public Health and Clinical Medicine
Sexual and Reproductive Health	Dept of Nursing
Social Medicine	Dept of Public Health and Clinical Medicine
Sports Medicine	Dept of Community Medicine and Rehabilitation
Surgery	Dept of Surgical and Perioperative Sciences
Urology	Dept of Surgical and Perioperative Sciences
Virology	Dept of Clinical Microbiology

Enclosure 2

General curriculum for doctoral studies in Medical science for doctoral students admitted up to 111231:

http://www.medfak.umu.se/digitalAssets/82/82897_allmn-studieplan-english-rev-110927-for-students-adm-up-to-111231.pdf

General curriculum for doctoral studies in Medical science for doctoral students admitted as of 120101 and on (Doctoral degree):

http://www.medfak.umu.se/digitalAssets/133/133207_general-curriculum-dr.pdf

General curriculum for doctoral studies in Medical science for doctoral students admitted as of 120101 and on (Licentiate degree):

http://www.medfak.umu.se/digitalAssets/133/133208_general-curriculum-lic.pdf

Enclosure 3

DOCTORAL EDUCATION AT THE FACULTY OF MEDICINE



Welcome as a newly admitted doctoral student at the Faculty of Medicine!

The director of studies and the faculty officer at the Dean's office would like to give you some suggestions and good advice to make your doctoral education as smooth as possible. The faculty's "Handbook for doctoral students, supervisors and examiners" is updated on an ongoing basis and we recommend that you read it regularly to stay informed about any news regarding doctoral education. You should also visit the faculty's homepage for doctoral education regularly. The handbook consists of different sections which makes it easy for you to find the exact information you need at any particular time.

Doctoral education normally takes 4 years, i.e. 48 months unless

- a) you and your supervisor have come to some other agreement in your individual study plan
- b) you have other tasks, for example departmental duties (maximum 20 %), which would mean that your doctoral education would take 5 years.

There are different forms of funding for doctoral students, for example doctoral studentship (*doktoranställning*) or when a doctoral student pursues his/her doctoral studies within a position at another employer. The university board has decided that from 2015, no doctoral grant (*utbildningsbidrag*) may be issued.

During your doctoral education, your individual study plan is your most important instrument! Your individual study plan **must** be followed up at least once a year. It is absolutely essential for both you and your supervisor that your progress as a doctoral student is followed up and evaluated so that your doctoral education is rewarding and productive and that you complete the education within the stipulated time period. Even if you do not pursue your doctoral studies full-time, the follow-up needs to be done every year.

The form "Individual study and funding plan with follow-up for doctoral education at Umeå University (part B)" must be used for follow-up after year 1 and 3. Follow-up after year 2 is done in conjunction with your 50 % seminar ("mittseminarium"). Follow-up after year 4 is done by the director of studies when you apply for public defence of your thesis. Should it become difficult to adhere to the time plan stipulated in your individual study plan, for instance because of problems with one of the projects included in the thesis, follow-up must take place more frequently than once a year.

As you have seen on the application form, the faculty requires you to achieve 30 ECTS of doctoral courses and other credit giving activities. 15 ECTS of the 30 ECTS is to consist of doctoral courses. The obligatory block consists of 3 doctoral courses, *Introduction course, 1 ECTS, a course in research methodology, 3 ECTS, and a course in research ethics, 3 ECTS*, and 1 presentation at a national/international conference. The faculty recommends that you complete the obligatory courses as early as possible during

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your doctoral studies.

All doctoral students who have research projects involving animals must go through the Animal Laboratory Science course (*Försöksdjurskunskap*) and all doctoral students doing clinical human research must do the Good Clinical Practice (GCP) course or the equivalent. On the faculty webpage, a course catalogue with the doctoral courses that will be offered the coming semester will be published each semester. Last date for application is in June and in December. It is your responsibility to apply for these courses and it is important that you plan, in the beginning of your doctoral studies, when you need to apply for and take the courses.

In addition to the compulsory courses requirements, other credit giving items are also required, for instance, active participation in the department's seminars and journal club and presenting your results at national/international conferences. A progress bonus will be given to you after you've had your 50% seminar ("mittseminarium"). The purpose of the progress bonus is to give the doctoral student an opportunity to get international scientific experience and to stimulate his/her networking for the future. The bonus may be used for e.g. travels to a conference to present research results and research visits. The trip must be approved by the supervisor and the examiner. The progress bonus will be transferred to the department after the Dean's Office has received a copy of the form Completed 50% seminar certificate. The bonus is currently 15 000 Swedish kronor.

LADOK is the university's registration system for students. All your activities, such as courses, seminars, presentations at conferences as well as follow-ups, must be registered in LADOK. Your examiner decides which courses can be included in your doctoral studies programme and he/she also assesses which credit giving activities are to be registered in LADOK and how many credits they are worth. Please note that it is your ongoing responsibility to provide the administrator with necessary details so that the correct information is registered.

We hope and believe that your time with us as a doctoral student will constitute an exciting and rewarding journey into the world of research. Unfortunately, doctoral students sometimes run into problems, for instance, there may be communication problems between a student and his/her supervisor. If this should happen, first of all, you should contact your examiner. You can also get help from the department's doctoral education group and/or the head of the department, from the university's coordinator for doctoral students or the faculty's director of studies.

The public defence of your thesis may feel far-off but we would still like to point out that it is important that you and your supervisor start to plan the defence of your thesis in good time. Your application must be submitted to the dean's office 12 weeks before the planned date of your defence and your supervisor must have organized a faculty opponent and an examining committee by then.

Once again, we wish you a warm welcome to our faculty! Do not hesitate to contact us if you have any questions.

Ulrich von Pawel-Rammingen
Director of Studies

Gunilla Mårald
Faculty Officer

<http://www.medfak.umu.se/utbildning/utbildning-pa-forskarniva/>

**Enclosure 4****Formalities prior to and during a public defence at the Faculty of Medicine**

In 2008, the Postgraduate Studies Board (FUN) noticed that there were considerable differences between different departments when it pertained to formalities prior to and during a public defence. In order to create a unified praxis for the public defence as well as update it for today's research environment, FUN revised the formalities document from 2004-05-13. The faculty wishes to stress that the public defence is not simply a ceremonial formality with a guaranteed outcome. In order for the examining committee and faculty opponent to be able to feel free to review and criticize both the dissertation as well as the defence it is therefore of utmost importance that the praxis surrounding this procedure is clearly regulated. If uncertainties still arise then those involved are requested to contact the dean's office for clarification.

Rules prior to and during a public defence at the Faculty of Medicine, established by FUN 2008-11-11

1. The supervisor shall carefully make certain that conflict of interest does not occur, be it with the examining committee or the faculty opponent. It is the supervisor's responsibility to certify this by signing the form, Application for public defence. The information will be reviewed by the director of studies and the dean's office. Information about rules regarding conflict of interest can be found in the Faculty of Medicine's Doctoral Education Handbook as well as in the form for Application for public defence.
2. All contacts with the faculty opponent and the examining committee **must** be taken care of by the supervisor, not the doctoral candidate.
3. The faculty opponent **may** be invited in advance to the post-defence party, in such case, this **should** be taken care of by the supervisor.
4. Traditionally the supervisor takes care of the faculty opponent the evening before the public defence. The doctoral candidate **can/may** participate in a social gathering (for example, a dinner) on such an occasion. This **should** occur together with another/some other colleagues and conversations regarding the defence/doctoral candidate, other than in general terms, **must** be avoided. The purpose of this is to "dedramatize" the upcoming public defence in such a way as to stimulate a better scientific discussion at the public defence itself. The faculty believes that if undue conversation is sought by either party then this can, with today's communication aids, take place anytime and least likely in the presence of others the day before the public defence.
5. The supervisor **may not** assume the role as chairman at the public defence. This is in order to avoid undue affect on the process.
6. The supervisors and the faculty opponent have the right to be present at the examining committee meeting.

Enclosure 5

HANDBOOK FOR EXAMINING COMMITTEES AND FACULTY EXAMINERS

1. INTRODUCTION

This handbook about the thesis defence ceremony is to function as guidance for the members of the examining committee, the faculty opponent and the chairman.

2. EXAMINING COMMITTEE

The requirements and guidelines that are in effect for the composition and obligations of the examining committee members can be found in the university's rules for defence. Proposals for the examining committee are made by the head of the department after consultation with the main supervisor and the examiner.

a) THE EXAMINING COMMITTEE'S COMPOSITION

- * The examining committee shall comprise three or five members.
- * For a licentiate seminar the examining committee shall comprise three members.
- * It is important that there are no objections to any of the examining committee members. A member of the examining committee may not be currently involved in any research with, or published any work, together with the candidate or the supervisors during the most recent five years. A supervisor-doctoral student relationship should be avoided or should have occurred more than 10 years ago. A written explanation should be submitted to the dean's office if a former doctoral student or a former supervisor is to be appointed member of the examining committee.
- * Members must be associate professors or professors. If there are extenuating circumstances a person who has a PhD but is not yet an associate professor may be selected to participate in the examining committee (a 5 person committee). A written explanation is needed.
- * For a licentiate seminar at least one of the members of the examining committee must be an associate professor or a professor. The others must have a PhD.
- * Of the examining committee's three or five members, one shall come from another university. No more than one (or two members in the case of a total number of five) should come from the doctoral student's department. For a licentiate seminar the examining committee does not have to comprise a member from another university.
- * The main supervisor, the assistant supervisors or the examiner may not be included in the examining committee.
- * Both genders should be represented on the examining committee.

b) EXAMINING COMMITTEE'S TASK

- At the thesis defence ceremony or the licentiate seminar:

The examining committee's task is to review and evaluate the dissertation, as well as its defence. The educational outcomes for the doctoral education, defined in the Higher Education Ordinance, should be the basis for the evaluation.

Degree of Doctor

Scope

A Degree of Doctor is awarded after the student has completed a study programme of at least 240 credits in a subject in which third-cycle teaching is offered.

Outcomes

Knowledge and understanding

For a Degree of Doctor the doctoral student must:

- demonstrate broad knowledge in and a systemic understanding of the research field, as well as advanced and up-to-date specialised knowledge in a limited area of this field; and
- demonstrate familiarity with research methodology in general and the methods of the specific field of research in particular.

Competence and skills

For a Degree of Doctor the doctoral student must:

- demonstrate the capacity for scholarly analysis and synthesis as well to review and assess new and complex phenomena, issues and situations autonomously and critically;
- demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work;
- demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research;
- demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general;
- demonstrate the ability to identify the personal need for further knowledge;
- demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.

Judgement and approach

For a Degree of Doctor the doctoral student must:

- demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics, and
- demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.

Miscellaneous

Specific requirements determined each higher education institution itself within the parameters of the requirements laid down in this qualification descriptor shall also apply for a degree of Doctor of Philosophy with a defined specialisation. Ordinance (2008:132).

Degree of Licentiate

Scope

A Licentiate is awarded *either* after the student has completed a study programme of at least 120 credits in a subject in which third-cycle teaching is offered *or* after a third-cycle student has completed one part comprising at least 120 credits of a study programme intended to conclude with the award of a PhD, if a higher education institution decides that a licentiate of this kind may be awarded at the institution.

Outcomes

Knowledge and understanding

For a Degree of Licentiate the doctoral student must:

- demonstrate knowledge and understanding in the field of research including current specialist knowledge in a limited area of this field as well as specialised knowledge of research methodology in general and the methods of the specific field of research in particular.

Competence and skills

For a Degree of Licentiate the doctoral student must:

- demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake a limited piece of research and other qualified tasks within predetermined time frames in order to contribute to the formation of knowledge as well as to evaluate this work;
- demonstrate the ability in both national and international contexts to present and discuss research and research findings in speech and writing and in dialogue with the academic community and society in general, and
- demonstrate the skills required to participate autonomously in research and development work and to work autonomously in some other qualified capacity.

Judgement and approach

For a Degree of Licentiate the doctoral student must:

- demonstrate the ability to make assessments of ethical aspects of his or her own research;
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

Miscellaneous

Specific requirements determined by each higher education institution itself within the parameters of the requirements laid down in this qualification descriptor shall also apply for a Licentiate with a defined specialisation.

Ordinance (2008:132)

The following points shall be judged:

- * clarity in describing the aim and questions
- * adequate and valid methods
- * relevance, originality, and innovative value
- * adequate discussions and interpretation of the scientific results

If a member of the examining committee has questions regarding the dissertation, the doctoral candidate must be permitted to respond to these in connection with the public defence. Active participation by the examining committee members in the subsequent discussion is desirable.

c) CHANGING EXAMINING COMMITTEE MEMBERS

- * Anyone who accepts the task of serving as a board member of the examining committee must have ensured that there are no obstacles to the assignment.
- * If a member of the committee finds that an obstacle has arisen, the head of the department must be contacted immediately. The head of the department must submit a new proposal for an examining committee member in writing to the dean's office, the dean will then appoint the new member.
- * Should a member of the examining committee be forced to cancel right before the public defence of the thesis, the head of the department must contact the dean immediately to arrange the appointment of a new examining representative.
- * Should a member of the examining committee not be present at the beginning of the defence of the thesis the chairman at the thesis defence ceremony has the authority to appoint a suitable replacement from the academic representatives present in the auditorium. **Please note that without the external member of the committee, the defence cannot be held!**

d) CONFLICT OF INTEREST

Provisions governing conflicts of interest are set forth in Section 11 of the Administrative law Act (1986:223). A conflict of interest refers to a circumstance, which causes a member of a decision-making body who takes part in a discussion or presents a matter, to lack objectivity in his or her decision. Faculty opponents as well as examining committee members should therefore be entirely independent from the candidate, supervisors and project.

3. FACULTY OPPONENT

- * The faculty opponent is responsible for the in-depth scientific review of the dissertation.
- * Anyone who accepts the task of serving as a faculty opponent must have ensured that there are no obstacles to the assignment.
- * If the faculty opponent finds that an obstacle has arisen, the head of the department must be contacted immediately. The head of the department must submit a new proposal for a faculty opponent in writing to the dean's office, the dean will then appoint the new faculty opponent. * Should the faculty opponent be forced to cancel right before the public defence of the thesis, the head of the department must contact the dean immediately to arrange the appointment of a new faculty opponent.
- * Should the faculty opponent not be present at the beginning of the defence of the thesis the chairman at the thesis defence event has the authority to appoint a suitable replacement from the examining committee. The chairman at the thesis defence will then appoint a suitable replacement from the academic representatives present in the auditorium as a new member of the examining committee.

4. THESIS DEFENCE CEREMONY

The thesis defence ceremony can be held in Swedish or in English. The ceremony is usually introduced by the chairman who presents the doctoral candidate, the title of the dissertation, the faculty opponent, and the examining committee members. The chairman gives the doctoral candidate the opportunity to speak first. At this point the candidate may state any corrections in the dissertation. The chairman then gives the floor to the faculty opponent who starts with a more comprehensive picture of the area of research that is treated in the dissertation and thereby sets the results of the dissertation in a larger context. The faculty opponent may then choose to 1) give a presentation and summary of the dissertation, or to 2) let the doctoral candidate give the presentation. If the faculty opponent choose to give a summary of the dissertation, he/she should then ask the doctoral candidate if the overview and summary give a correct picture of the dissertation contents and the doctoral candidate replies. The faculty opponent may then, if this has been agreed upon, ask the doctoral candidate to complete the presentation. Regardless of which alternative the faculty opponent chooses, the doctoral candidate must be informed at least 2 weeks in advance of which alternative the faculty opponent will use. After this the actual review of the dissertation begins. This may vary in form and scope, but should mainly be a dialogue between the faculty opponent and respondent. After the faculty opponent's review the examining committee and the auditorium must be given the opportunity to ask questions and present viewpoints. Critical viewpoints from the examining committee will be presented during the thesis defence ceremony. The auditorium will be given the opportunity to present viewpoints. There is no maximum time for a public defence of the thesis. The examining committee may decide to take a break during the ceremony if it is lengthy. The chairman adjourns the thesis defence ceremony.

5. EXAMINING COMMITTEE MEETING

- * The examining committee starts their meeting directly after the thesis defence ceremony/the licentiate seminar.
- * According to the rules of the university, the faculty opponent and the supervisors have the right to be present at the examining committee meeting and to participate in the discussion, but not in the decision.
- * The examining committee appoints a chairman and a secretary within the committee.
- * The thesis and the defence will be awarded a combined mark, pass or fail. The decision shall reflect the majority opinion among the examining committee members. The committee decides whether the grade is to be justified and if a reservation is to be registered. If the committee is divided in its decision on the grade and if the thesis is given the grade Fail, the decision must always be justified.
- * The examining committee chairman is responsible for letting the doctoral candidate know the committee's decision immediately after their meeting. The chairman is also responsible for sending the minutes to the Registrar at Umeå University no later than one week after the public defence of the thesis.

Enclosure 5

* Translation from Swedish

Information for examiners of doctoral studies at the Faculty of Medicine, Umeå University

What is the role of an examiner?

As examiner, you monitor the process and progress of the doctoral student throughout the doctoral studies. You are expected to take part in the annual follow-up meetings and attend the 50% seminar ("mittseminarium"). You may also have the role of chairperson at the public defence of the doctoral thesis.

Each doctoral student must have a reference person, a teacher/researcher with academic qualifications who is not involved in the doctoral student's research project. The reference person could be you as examiner but it could also be another teacher/researcher. Together with at least two of the doctoral student's supervisors, the reference person is part of a reference group that meets with the doctoral student at a formalised meeting in conjunction with the follow-up of the student's individual study plan, i.e. at least once a year.

What is the role of the examiner prior to a doctoral student being admitted to doctoral studies?

You should be involved in the planning of the doctoral student's studies, in particular the planning of what courses are to be included and what literature and journals are to be covered, in order to ensure that the doctoral student gains sufficient subject knowledge during the doctoral studies.

The faculty has rules for what course requirements apply for doctoral students. New doctoral students are required to obtain 30 credits. The courses must be primarily at the doctoral (third-cycle) level. Maximum 7.5 credits may be transferred from the undergraduate (first-cycle) or the Master's (second-cycle) level to the doctoral (third-cycle) level. It is you as examiner who decides if a course from a lower level can be transferred and counted as part of the doctoral studies.

What courses must the doctoral student take?

To obtain 30 credits, there is a compulsory part and an individual part, the latter being tailored to complement the doctoral student's previous knowledge and needs regarding the research project. At least 15 of the 30 credits must be courses at the doctoral (third-cycle) level. Many doctoral students want to include as many courses as possible in the framework of their doctoral studies. Note that doctoral studies comprises 240 credits in total, no matter whether it takes four or five years to complete the doctorate. If a doctoral student has a large block of courses, e.g. 60 credits, the actual thesis part will be proportionately smaller. In other words, the proportion of doctoral courses should be about 30 credits.

* This document has been translated into English. In case of divergence of meaning between the English and Swedish wording of this document, the Swedish wording shall prevail.

- The compulsory part consists of an ethics course and an introductory course in the theory of science and research methodology. Moreover, a course in laboratory animal science is

compulsory if laboratory animals are used in any of the doctoral student's sub-projects and a course in Good Clinical Practice (GCP) is compulsory for those who conduct studies on humans in a clinical context.

- Courses in statistics and methodology are the courses that are targeted at the doctoral student's specific subject knowledge needs. The faculty offers courses in statistics at the doctoral (third-cycle) level and all doctoral students should ensure that they do at least one course in statistics, whether at first, second or third-cycle level. The examiner, supervisor and doctoral student are to decide together what courses in statistics the doctoral student needs. In addition to statistics, there is also a range of other methodology courses that the faculty offers so that each doctoral student is offered a broad education.
- Other credit-giving activities, such as seminars and journal clubs, doing research at another university, or presentations at conferences, are included in the individual block. In the doctoral student handbook, there is a template for how the calculation of credits for these activities is done.

What does "registering in Ladok" mean?

Ladok is a national database for the registration of credits awarded for students at first-undergraduate, Master's and doctoral level. All doctoral students must report their courses to the departmental administrator who in turn registers them in Ladok. For doctoral students admitted as of 1 July 2014, credits gained for seminars, journal clubs, presentations at conferences and research visits are all reported on one single occasion before the public defence of the thesis. It is your task as examiner to assess how many credits are to be given for seminars and other activities that have not been allocated credits in advance. The examiner must sign the document that is used as the basis for the administrator's documentation in Ladok. When the doctoral student is ready to defend the thesis, a certificate is extracted from Ladok and submitted with the form requesting the public defence of the thesis. The number of course credits on the form requesting the public defence of the thesis and the documentation in Ladok must agree. Everything documented in Ladok will be stated on the degree certificate which is why it is important the records in Ladok are not too "diverse". Ladok must not be seen as a type of CV for the doctoral studies.

Individual learning outcomes and national intended learning outcomes

All doctoral students, no matter what subject/subject specialisation, are to reach the national intended learning outcomes for doctoral studies. Each doctoral student has an individual study plan stating his/her individual learning outcomes. The purpose of the individual learning outcomes is to ensure that the doctoral student reaches the national intended learning outcomes as a whole.

At each annual follow-up meeting, at the 50% seminar ("mittseminarium"), and prior to the defence of the thesis, the doctoral student, supervisor and examiner must assess whether the individual outcomes and national intended learning outcomes have been reached, fully or in part. Some of the national intended learning outcomes are reached during the actual defence of the thesis which means that all learning aoutcomes will then have been attained.

What is your role as examiner prior to and during the public defence of the thesis?

Some form of examination of subject knowledge is required but there is no general rule for how it must be done. Therefore, the form of examination can vary, either oral or written examination, the writing of reports, holding a lecture on the subject matter, etc.

Before the defence of the thesis, you must sign a certificate certifying that all the courses have been completed and passed. This is needed before the departmental administrator can register data in Ladok. You may also be the chairperson at the public defence of the thesis. You will not be the examiner at the actual defence of the thesis. This is the task of the examining committee.

Enclosure 6**Introduction of new doctoral students at departmental level**

The Faculty of Medicine's departments have requested a checklist which can be used for the introduction of new doctoral students. The faculty has therefore drawn up the template below.

Checklist

Introduction to place of work

Before students begin their studies

Inform other staff and persons in charge

Organize a desk/office/workroom

Week 1

Introduction to colleagues and place of work including staff meetings, webpages, profile programmes etc.

Information about administrative procedures e.g. key/door pass, pigeonhole for mail, telephone, computer, email address, copier/printer, parking space and parking permit, how to book rooms.

Information about terms of employment, working hours, leave of absence, and illness (PASS)

Information about the organisation of the university including units such as IT support, salaries department and the university library (UB).

Information about safety procedures, e.g. what to do in the event of a fire.

Information re: public access to official documents, handling, storage and archiving of research material

Information about agreements for occupational health service (Feelgood) and physical exercise (IKSU)

Laboratory work

Information about

- safety instructions and procedures
- procedures for washing-up and waste disposal
- shared equipment and the list showing who is in charge
- procedures for ordering expendable items, equipment etc.

If the doctoral student comes from abroad

Information about:

- how to acquire a personal identity number, bank account, home telephone, internet, insurance (if required)
- accommodation and public transport

If the doctoral student is also working clinically

Information about the rules that apply for a doctoral student employed by the County Council

A doctoral student who is employed by e.g. Västerbotten County Council has the same right to information as a doctoral student employed at Umeå University!

Faculty of Medicine

The Strategic board for research (FON)

Rådet för utbildning på forskarnivå (RUF)

During the first six months

Information about:

The faculty handbook and webpage

Individual study plan - to be followed-up at least once a year with a 50% seminar after
year 2

- to be revised when necessary

Rights and obligations of supervisors and doctoral students, for instance the document *Terms for the supervision of research students (Villkor för forskarhandledning)*.

The role of the examiner

Obligatory/subject-specific courses, seminars and journal clubs and FON's travel funds

Ladok- the continuous reporting of completed courses and other credit giving activities

- reporting of work/activities and funding (every term)

- registration (every term)

The doctoral student salary ladder

Teaching/other departmental duties

Doctoral student coordinator and other persons who can be contacted in the event of problems

Enclosure 7

Regulations for doctoral education at Umeå University

http://www.umu.se/digitalAssets/186/186614_regulations-for-doctoral-education-at-ume-university.pdf

Exemption from the general admission requirements for applicants to doctoral studies

Exemption from the general admission requirements for doctoral studies can only be granted to an individual applicant (see below for excerpt from the Higher Education Ordinance).

Doctoral education should be founded on knowledge acquired in the first level and second level education.

Therefore, an application for exemption from the general admission requirements may be sent to the Dean's office after completing the 5th semester of higher education (at least 150 ECTS registered in Ladok) and only if the applicant can demonstrate abilities to benefit from education at the doctoral level.

Exemption from the general admission requirements may be granted when the faculty and/or the research group judge that an individual applicant is considered to be of future value for the faculty and when the faculty, by approving exemption, can ensure future teaching competence.

The intended supervisor is responsible for applying for exemption from the general admission requirements. The faculty's Director of Studies must have made a decision before an application for admission can be sent to the Dean's office. The application form for exemption can be found at this web page:

<http://www.medfak.umu.se/utbildning/utbildning-pa-forskarniva/blanketter/>.

Excerpt from the Higher Education Act (Högskolelagen)

Section 9a

Third level education shall essentially build on the knowledge that students acquire in first level and second level education or corresponding knowledge.

In addition to what applies to first level and second level education, third level education shall develop the knowledge and skills needed to be able to conduct research independently.

Law (2006:173)

Excerpt from the Higher Education Ordinance (Högskoleförordningen)

General entry requirements

A person meets the general entry requirements for third-cycle courses and study programmes if he or she:

1. has been awarded a second-cycle qualification
2. has satisfied the requirements for courses comprising at least 240 credits of which at least 60 credits were awarded in the second-cycle, or
3. has acquired substantially equivalent knowledge in some other way in Sweden or abroad.

The higher education institution may permit an exemption from the general entry requirements for an individual applicant, if there are special grounds. Ordinance (2010:1064).

Ordinance (2010:1064)

(HF 7 chapter 39 section)