

Opasraportti

Tieteellinen jatkokoulutus 2010-2012 (2010 - 2011)

UNIVERSITY OF OULU

FACULTY OF MEDICINE

STUDY GUIDE 2010-2012

ACADEMIC POSTGRADUATE EDUCATION

To the reader

This study guide is intended to academic postgraduate education in the Faculty of Medicine. Stipulations concerning postgraduate degrees and theses have been prepared by the Postgraduate Research Committee and approved by the Board of the Faculty of Medicine. In addition to this study guide, further information on academic postgraduate education can be obtained from members of staff responsible for supervising doctoral theses, the heads and homepages of the various departments, the Chief of Postgraduate Education, tel. 08-5375106, e-mail: eija.ruottinen@oulu.fi (address: Aapistie 5 A, PL 5000, 90014 University of Oulu), and from the Postgraduate Student Affairs Office, tel. 08-5375107.

In addition, it is useful to check the departmental/clinic notice boards and the *faculty website* for information on current educational affairs (www.medicine.oulu.fi/tieteellinen).

The study guide, applications for right to pursue postgraduate studies, postgraduate study plan forms and thesis monitoring form are also available at the website of the Faculty of Medicine.

Should the stipulations for postgraduate degrees change essentially during the validity period of this study guide, a separate notice will be issued of them.

Students can already begin their doctoral studies when studying for their first degree. Academic postgraduate education is also open to first-degree students.

Eija Ruottinen

Chief of Postgraduate Education

Study guide for academic postgraduate education 2010-2012

1. STIPULATIONS CONCERNING ACADEMIC POSTGRADUATE EDUCATION 2010-2012

Introduction

The following scientific postgraduate degrees can be completed at the Faculty of Medicine, University of Oulu

Doctor of Dentistry

Doctor of Medicine

Doctor of Philosophy

Licentiate in Health Sciences

Doctor of Health Sciences

The disciplines/main subjects are selected from those available at the departments the Faculty of Medicine, the clinics of Oulu University Hospital or separate institutes. In addition to a licentiate and doctoral thesis, licentiate and doctorate degrees include postgraduate studies specified in the personal postgraduate study plan.

The Government Decree on University Degrees (A794/2004), which was issued by the Council of State, provides for lower and higher university degrees and also for scientific and artistic postgraduate degrees.

Section 35 of the University Act 558/2009 provides for eligibility for academic postgraduate studies.

Scope of studies

The scope of studies is indicated as study credits. Study modules are measured on the basis of the amount of work that they require. The average of 1600 hours of work required for completing a single academic year corresponds to 60 study credits. Replacing the former system of measuring studies in terms of credit units with the European ECTS credit system is based on the aim of improving the international comparability of Finnish university degrees.

2. TRANSITION PROVISIONS CONCERNING STUDIES

The Council of State awarded a Decree on University Degrees in Helsinki on 19th August 2004 (Decree A 794/2004). Students who are studying for a degree based on the abolished decrees when the present decree entered into force

on 1 August 2005 can continue their studies either in accordance with the new degree or the abolished decrees, as laid down in the transition provisions of the Act Amending the University Act (715/2004). The transitional period for those studying to become licentiates in medicine or dentistry shall end on 31 July 2010.

3. SUMMARY OF THE STAGES INVOLVED IN PRODUCING A THESIS

1. The postgraduate student discusses a possible topic with the supervisor or main representative of the discipline in question. The postgraduate student and supervisor draw up supervising agreement.

2. The student applies for study right and enrolls at the university. He/she must also draw up a brief preliminary research plan on the research topic, to be handled by the Postgraduate Research Committee.

3. The student draws up a personal postgraduate study plan, which must be done at an early stage in the work.

4. The Postgraduate Research Committee approves the postgraduate study plan.

5. The student submits the manuscript and an application for printing permission to the Postgraduate Research Committee. The manuscript must be in its final form. When the Postgraduate Research Committee has accepted the manuscript, it can be submitted to the referees, who will be appointed by the Postgraduate Research Committee.

6. After the referees have given their statements, the Postgraduate Research Committee will decide whether to grant a printing permission and appoint an opponent and Custos.

7. Publication of thesis

Contacts to the Publications Committee, if the thesis is to be published in the Acta Universitatis Ouluensis series. The thesis can also be published in some other series.

8. Public discussion of the thesis

9. The Postgraduate Research Committee approves the thesis on the basis of the opponent's statement.

10. The candidate presents certificates or an account of completion of general studies to the Head of Postgraduate Education at least a week before the meeting of the Postgraduate Research Committee.

11. The Dean awards a certificate of the Degree of Doctor.

The Optima learning environment is used at the various stages of the thesis compilation process. The postgraduate students logs onto the Optima environment (paju/koivu user IDs of the university). The Faculty homepage contains separate instructions about the use of Optima.

Important links

<http://www.medicine oulu.fi.html/>

<http://www.medicine oulu.fi/koulutustiedotteet.html>

<http://www.medicine oulu.fi/tieteellinen%20jatkokoulutus.html>

<http://www oulu.fi/tutkijakoulutus/> (Research support package, information on graduate schools)

<http://www.kirjasto oulu.fi/index.php?id=104> (Publishing services, Acta series)

4. MAIN ASPECTS OF ACADEMIC POSTGRADUATE STUDIES

4.1. Applying for a study right and registering of the thesis

A candidate for postgraduate research must:

- Choose the subject in which he/she wishes to complete postgraduate studies and contact the supervisor in order to agree on practical matters
- Together with the supervisor, suggest a thesis monitoring group
- Fill in an application for a study right for the completion of academic postgraduate education, accompanied by a preliminary postgraduate study plan and a preliminary research plan
- Submit the study right application to the Postgraduate Research Committee of the Faculty of Medicine. The Committee discusses applications about once per month.

Applications can be printed from the Faculty website.

<http://www.medicine oulu.fi/tieteellinen%20jatkokoulutus.html>

The decision to grant admission is made by the *Dean* on the basis of the Postgraduate Research Committee's proposal.

There is not set application time. The study right begins on the date on which the thesis is registered.

4.2. Enrolment at the University

Having gained admission, the postgraduate student is required to enrol at the University. An enrolment form will be sent to the student together with the notice of admission. It can be returned to the Postgraduate Student Affairs Office, address PL 5000, 90014 University of Oulu or directly to Student Services in Linnanmaa, address PL 80800, 90014 University of Oulu.

The postgraduate student must enrol anew every year (between 1 August - 15 September) until he/she has completed the intended licentiate or doctor's degree. Registration with the Student Union is voluntary. If the postgraduate student wishes to become member of the Student Union, he/she must register during the registration period at the beginning of the term and pay the Union membership fee. It is also possible to register with the Student Union in the middle of the term if the student gained admission during the term. In that case he/she must register with the Student Union within two weeks from the admission. Student Health Services and discounts on train tickets are not available to postgraduate students having paid the fee. Meals are available at staff prices.

Registering in the Internet

Postgraduate students can also register in the Internet, provided that they have a valid ID for the Paju computer in the Computer Centre. An enrolment of presence and paying the fees of the Student Union (additional information from student services) in WebOodi is possible if the student has a web-bank user ID and password for Nordea, OP-Pohjola or Sampo. Postgraduate students, who enrol as absent or who enrol as present but do not join the Student Union, do not need web-bank user IDs or passwords.

Postgraduate students can also register through *e-mail* in the address

opintoasiat@oulu.fi

Additional information on enrolment is available from student services tel. 08-5534035/5534046/5534036/5533968, from the website of the University of Oulu (<http://www.oulu.fi/>) or directly from WebOodi (<https://weboodi.oulu.fi/oodi/>)

The university's telecommunications services, including a personal e-mail address, are available to students enrolled as present (ADP centre, tel. 08-5533080). If the student does not enrol, the ADP Centre will remove his/her Paju user IDs.

Registering on a postgraduate education list

Postgraduate students can register on a postgraduate education list (ltkjatkot@lists.oulu.fi) by sending e-mail to ltkjatkot-request@lists.oulu.fi. The subject of the message must be "subscribe". Nothing else should be written in the e-mail. Through the mailing list the student will receive information on education, for instance, directly to his/her e-mail.

3.3. Completing doctoral studies and writing the doctoral thesis

As a rule, it will take 3 to 4 years of full-time work in order to complete a doctoral degree, which consists of the thesis and postgraduate studies. The purpose of postgraduate studies is to support the preparation of the thesis so it is a good idea to start them at the beginning of the thesis preparation process. The student draws up a postgraduate study plan together with his/her supervisor. The research required for the thesis is conducted with the help of the supervisor and the monitoring group.

4.4. Postgraduate study plan

The student must prepare a personal postgraduate study plan on a separate form (available on the Faculty website at <http://www.medicine.oulu.fi/>) according to instructions approved by the Postgraduate Research Committee already at the early stages of the work of the thesis. The plan covers any theoretical and other education included in the Doctoral or Licentiate Degree and provides a research plan and its abstract. The research plan must be prepared as early as possible, preferably as soon as the form of the thesis has been outlined. The intention is that all postgraduate students already have a personal plan at the early stages of their studies that makes best possible use of their research work. The research plan is prepared under the supervision of a supervisor and has to be approved by him/her.

The postgraduate study plan is approved by the Postgraduate Research Committee. It should be accepted before printing permission can be applied for the thesis.

4.5. Appointment of referees

The completed manuscript and application for a printing permission are submitted to the Faculty's Postgraduate Research Committee, which will appoint referees to the thesis.

4.6. Granting of the printing permission and appointment of opponent

The Postgraduate Research Committee will grant a printing permission for the thesis on the basis of the referees' statements and appoint the opponent and Custos.

More detailed instructions about the printing and distribution of the thesis are given in Section 6 below.

4.7. Publishing Committee

If the thesis is to be published in the Acta Universitas Ouluensis series, the candidate shall contact *Kirsti Nurkkala*, Secretary of the Publishing Committee (tel. 5534098, e-mail (kirsti.nurkkala@oulu.fi) on matters concerning publishing. Up-to-date instructions and forms for the Acta Universitatis Ouluensis series of the University of Oulu are available at <http://www.kirjasto.oulu.fi/index.php?id=427>

All the publications having appeared in the series after the beginning of 2010 have been printed by Juvenes Print in Tampere. Information on the printing house, for example, has been changed in the instructions and forms.

The Postgraduate Research Committee will provide the Publishing Committee with an extract from the minutes concerning the granting of the printing permission and the statements issued by the referees. The doctoral candidate must also check the thesis manuscript together with the Faculty of Medicine's representative in the Publishing Committee.

Matters concerning the publishing of the thesis are discussed in more detail in Section 6.

4.8. Public discussion of the thesis

The thesis will be examined in a public discussion. The doctoral candidate shall book an auditorium for the public discussion, report the date to the Faculty's Postgraduate Student Affairs Office in good time and deliver *6 copies of the thesis* to the office for official distribution and public display at least *10 days before the public discussion*.

4.9. Approval of the thesis

The opponent appointed by the Faculty will submit a written statement on the thesis and on the candidate's ability to defend it in public. The Postgraduate Research Committee will decide on approving the thesis as a demonstration that qualifies the candidate for the doctorate degree on the basis of the opponent's statement.

4.10. Issuing of the degree certificate

When all the studies required for the degree have been completed and the thesis or the licentiate paper has been approved, the student may apply for a degree certificate from the Faculty. The research supervisor approves postgraduate studies on the basis of certificates and the Faculty confirms them as completed and suitable for the degree.

5. REQUIREMENTS FOR DOCTORAL AND LICENTIATE DEGREES

5.1. Preconditions for completing a scientific postgraduate degree

According to Section 37 of the University Act 558/2009, eligible for studies leading to a postgraduate degree shall be a person who has completed

1. an applicable higher university degree
2. an applicable higher polytechnic degree
3. an applicable education completed in a foreign higher education institution

The university may require a student admitted to study for an academic or artistic postgraduate degree complete the necessary supplementary studies in order to acquire the knowledge and skills needed for the studies (Section 37 of the Universities Act 558/2009).

The Faculty of Medicine requires that a student admitted for postgraduate education has completed an applicable higher university degree or has completed an applicable education in a foreign higher education institution.

5.2. Aims of academic postgraduate education

According to Chapter 5, Section 21, of the Government Decree on University Degrees (794/2004), the aim of postgraduate studies is that the student:

- 1) becomes well-versed in his/her own field of research and its social significance and gains knowledge and skills needed to apply scientific research methods independently and critically and to produce new scientific knowledge within his/her field of research;
- 2) becomes conversant with the development, basic problems and research methods of his/her own field of research; and
- 3) gains such knowledge of the general theory of science and of other disciplines relating to his/her own field of research as enables him/her to follow developments in them.

5.3. Completing the Doctorate Degree

According to Section 22 of Government Decree on University Degrees (794/2004), to complete the doctorate degree, the postgraduate student must:

- (1) complete the required postgraduate studies;
- (2) demonstrate independent and critical thinking in the field of research; and
- (3) write a doctoral thesis and defend it in public.

The doctorate degree consists of the thesis and an amount of theoretical studies confirmed by the Faculty. The student completing the degree must attend degree-related studies in the manner prescribed by the Faculty and publish a doctoral thesis.

6. DOCTORATE DEGREES IN MEDICINE AND DENTISTRY

Study right

The right to study for a doctorate degree in medicine and dentistry can be awarded to a person having completed a licentiate degree in medicine or dentistry in Finland or a corresponding degree in a foreign higher education institution.

The student can already apply for a study right, enrol as a postgraduate student, write a personal postgraduate study plan and start theoretical studies before completing the licentiate degree.

Degree requirements

To obtain the degree of Doctor of Medicine/Doctor of Dentistry, the student must complete studies comprising at least *30 study credits*, prepare a thesis and defend it in public. The degree consists of general education, field-specific education and thesis.

General education

The purpose of the general education is to familiarise the student with the fundamentals and methods of scientific research, scientific thinking and writing, and the ethical principles of research work. General studies must contain courses on research planning, methods, scientific writing, research ethics, theory and philosophy of science, and other education that supports research work.

The extent of general studies is *7- 10 study credits*. In addition to the postgraduate education courses arranged by the Faculty of Medicine, the student can select courses from studies arranged by graduate schools, from the postgraduate programmes of other faculties and from the national academic postgraduate programme. The plan for general education must be presented in connection with the plan for postgraduate studies. The student taking the postgraduate degree can also participate in general education before taking the licentiate degree.

Field-specific education

The aim of field-specific education is to achieve profound knowledge of one's own field of research and its methods and to follow scientific developments in the field concerned.

The scope of the education is *20-23 study credits*.

Field-specific education can include the following *studies agreed with the supervisor*:

- postgraduate seminars arranged by projects/departments
- discipline-specific methodological courses and researcher courses
- scientific research reports and articles (other than the thesis)
- literature, verbal examinations and essays specific to discipline and research field
- working in research institutes
- specialist qualifications in medicine or dentistry can be deemed to correspond to part of the field-specific education (7.5 study credits)

The postgraduate student can also participate in postgraduate field-specific education before completing the licentiate degree.

Studies contained in the doctorate degree are approved by the supervisor of the thesis.

7. DEGREE OF DOCTOR OF PHILOSOPHY

Study right

To qualify for the degree of Doctor of Philosophy, the person must

- 1) have completed a higher academic degree in a Finnish university,
- 2) have completed a corresponding degree in a foreign university, or
- 3) whom the educational unit ascertains in some other way to have the sufficient knowledge and capabilities for pursuing such studies

The student can already apply for a study right, enrol as a postgraduate student, write a personal postgraduate study plan and start theoretical studies before completing the licentiate degree.

Degree requirements

To obtain the degree of Doctoral of Philosophy, the student must complete studies comprising at least 60 study credits, prepare a thesis and defend it in public. The credits are to be approved by the supervisor of the thesis.

If the student has completed a licentiate degree, the Postgraduate Research Committee will decide what part of the requirements for a doctorate degree this can be deemed to cover, and what additional studies are required, in connection with the acceptance of his/her study right application or study plan.

The Postgraduate Research Committee also decides on possible additional studies required of students having a completed a degree other than a higher academic degree.

The studies required for the degree of Doctor of Philosophy can consist of the following *studies to be agreed with the supervisor*:

- postgraduate seminars arranged by projects/departments
- discipline-specific methodological courses and researcher courses
- scientific research reports and articles (other than the thesis)
- literature, verbal examinations and essays specific to discipline and research field
- working in research institutes
- special courses in Finland or abroad related to the research field
- postgraduate scientific courses, university pedagogical courses and language studies

Studies contained in the doctorate degree are approved by the supervisor of the thesis.

8. DEGREES OF DOCTOR OF AND LICENTIATE IN HEALTH SCIENCES

8.1. Degree of Doctor of Health Sciences

Study right

For completing the degree of Doctor of Health Sciences, the Faculty can accept a person who has completed the degree of Master of Health Sciences or a corresponding degree.

The student can also complete the degree of Doctor of Philosophy instead of the Doctor of Health Sciences, as stipulated separately.

The student can already apply for a study right, enrol as a postgraduate student, write a personal postgraduate study plan and start theoretical studies before completing the licentiate degree.

Degree requirements

For the degree of Doctor of Health Sciences, the student is required to complete at least 60 study credits, prepare a thesis and defend it in public.

Preliminary studies in health sciences

Preliminary studies in health sciences (7.5 study credits) are intended to those students who have not completed the degree of Candidate in or Master of Health Sciences. Their content and nature should be agreed upon separately. These preliminary studies must be completed before the beginning of the actual postgraduate studies.

Postgraduate studies consist of the following sub-areas:

1. General postgraduate studies (7 -12 study credits)

These courses can be chosen from the postgraduate programme of the Faculty of Medicine or that of some other faculty.

2. Subject studies in health sciences (22-38 study credits)

These can be accumulated

a) by taking health science courses at one's own university

b) by taking national health science courses

c) by taking examinations based on literature

d) by attending international scientific congresses

(max. 7.5 study credits)

e) in some other agreed manner

Subject studies in health sciences should also include methodology of relevance to the proposed field of research.

3. Other studies relevant to the field of research (15-30 study credits)

Depending on the field studied, the student can choose closely related courses from the degree programmes of other sciences (social and behavioural sciences, medicine, etc.). These should for the most part be of the advanced studies level.

4. Research seminars

At least 3 study credits

Studies included in the Doctorate Degree are approved by the supervisor of the thesis.

8.2. Degree of Licentiate in Health Sciences

According to Section 23 of Government Decree on University Degrees (794/2004),

a student accepted to postgraduate studies may obtain the degree of Licentiate in Health Sciences, when he/she has completed the part of postgraduate studies required by the University. The degree includes a licentiate thesis in which the student is required to show good understanding of health sciences and an ability to apply the methods of scientific research independently and critically within the selected field of research.

In order to obtain the degree of Licentiate in Health Sciences, the student must, except for the doctoral thesis, complete the studies also required for the degree of Doctor of Health Sciences (60 study credits).

Study right

For completing the degree of Doctor of Health Sciences, the Faculty can accept a person who has completed the degree of Master of Health Sciences or a corresponding degree.

Aims of the degree

The aim of academic postgraduate education is that the student becomes well-versed in his/her own field of research and gains knowledge and skills needed to produce new scientific knowledge within his/her field of research. In the licentiate degree the student must show good understanding of his/her field of research and an ability to apply scientific research methods critically and independently.

Degree requirements

The degree of Licentiate in Health Sciences consists of 60 study credits of theoretical studies and a licentiate thesis.

For the licentiate degree the student must complete the same postgraduate studies as those required for completing the degree of Doctor of Health Sciences (see above).

Postgraduate studies are approved by the supervisor of the licentiate thesis.

9. REGULATIONS REGARDING DOCTORAL THESES

9.1. What is required of a thesis?

A thesis should demonstrate an ability on the part of the writer to apply the methods of scientific research independently and critically within the selected field of study, a profound knowledge of the field studied, of other related fields and of the general theory of science and an ability to work independently to generate new scientific data

9.2. Supervisor

A person who seeks to complete a doctorate degree must arrange for a suitably qualified teacher or researcher in the Faculty of Medicine of the University of Oulu (professor, docent), and ask if he/she would like to act as the supervisor. The student and the supervisor then conclude a **supervising agreement**, which lays down their responsibilities, supervisor meetings, the thesis timetable and the practical issues connected with the thesis. There can be 1-2 supervisors, and more for a justifiable reason. One of the supervisors must be a professor or docent, and the other at least having completed a doctorate degree.

The supervisor is responsible for ensuring for his/her part that the work submitted as a doctoral thesis meets the aims set for it in terms of content, quality and form. The supervisor also accepts the candidate's personal study plan and theoretical education.

9.3. Monitoring group

The system of monitoring thesis projects was initiated in autumn 1997, based on the Faculty Board's decision of 13 May 1997.

A monitoring/support group is appointed to each postgraduate student upon the granting of study right.

The purpose of the group is to improve thesis projects, monitor the progress of the thesis work, to support the postgraduate student and the supervisor and to assist them in possible conflicts and problems. The members of the monitoring group (2-4) may not be involved with the thesis. The members of the monitoring group must at least have completed a doctorate degree. The supervisor cannot be a member. The group can also be specific to a certain research group. The monitoring group should be summoned at least once a year by the doctoral candidate or supervisor. The postgraduate student draws up a summary report of monitoring group's meeting and submits it to the Postgraduate Research Committee. The summary reports can be accepted as part of theoretical doctoral studies.

9.4. Form of the thesis

A thesis is required to be a scientific presentation of independent research carried out on some topic within the disciplines represented by the Faculty. *It can consist either of a monograph or a series of papers.*

A monograph is a scientific presentation only in the name of the doctoral candidate, which is based on previously unpublished results from independent research work.

For a thesis consisting of a series of papers, it is stated in the statute on university degrees that it can consist of a series of scientific publications or manuscripts approved for publication on the same general topic together with a summary, or other types of work that meets the corresponding

criteria. The latter can include joint publications, provided that the candidate has demonstrably played an independent part in their production.

The summary must be written entirely by the candidate. However, the publications can also include joint publications by several authors, provided that the candidate has evidently played an independent role in their production. As a rule, a publication can be included in one doctoral thesis only. If somebody else wishes to include the same publication in another doctoral thesis, he/she must obtain a written permission from the first author and the supervisors of the thesis (for instructions, see the section on application for printing permission).

The publications to be printed as part of the thesis must already have been published or approved for publication in scientific periodicals or publications that use the referee system. The candidate shall ask the publisher's permission to use the publications as part of the thesis. A review article may also be included in the original works of a thesis composed of several papers if it is a meta-analysis or a similar systematised review that evidently generates new information on the research topic. If the review article is part of a literature review, it must be drawn up by the candidate.

The thesis should primarily be written in a language used internationally in the field concerned or, if appropriate in view of the topic, in either Finnish or Swedish. The thesis should also include a one-page summary in Finnish or Swedish and English.

9.5. Application for printing permission and appointment of referees

When the doctoral candidate and the supervisors are of the opinion that the content of the manuscript of the thesis is complete and its form has been finished for preliminary examination (appointment of referees), the doctoral candidate applies for a printing permission from the Postgraduate Research Committee of the Faculty of Medicine. *It the thesis consists of several publications, the printing permission can be applied for at the point when all sub-investigations except for one have been published or approved for publication. If there are six or more sub-investigations, two of them may be unapproved.* The application for printing permission, the manuscript copy and their annexes must be submitted to the Postgraduate Student Affairs Office at least one week before the meeting of the Postgraduate Research Committee.

The following documents must be annexed to the application:

- 1) Manuscript of the thesis in three full copies (including a one-page abstract)
- 2) In a thesis consisting of several publications, a list of sub-investigations (name, authors, publishing forum and publishing stage, and an account of the sub-investigations that have been approved for publication but have not yet been published). In the case of a monograph, an *abstract* of the main aspects of the research.
- 3) *An account (1-2 pages) of the candidate's personal contribution in each sub-investigation, approved and signed by the candidate and the supervisor(s) of the thesis.*

4) If the sub-investigations have been used in more than one thesis, the candidate must provide an account of this in accordance with the following instructions approved by the Faculty:

An account of using a publication in more than one thesis

1. As a rule, a publication can be included in one doctoral thesis only.
2. The first author has the privilege to use his/her publication in his/her own thesis.
3. Including the publication in another doctoral thesis requires the written permission of *the first author and supervisor (s) of the thesis work*.

This granting of permission must be indicated in an account drawn up jointly by the relevant authors (whose publications appear in the thesis) and supervisors, outlining the part played by the authors in the performing of the research and in drawing up the publication. They must deliver the account to the Postgraduate Research Committee as an appendix to the application for the printing permission and to the referees as an appendix to the thesis manuscript. The account must be signed and confirmed by the head of the relevant department. Possible disputes shall be settled by the Postgraduate Research Committee or the Faculty Board.

4. As a rule, at least a half of the publications that make up the doctoral thesis must be of a kind that have not been published/will not be published in a doctoral thesis.

Sub-investigations must have been published in high-quality scientific series or periodicals or accepted for publications except for one at the most.

5. Any justified deviation from these instructions is subject to the decision by the Faculty Board.

The application for a printing permission must also include proposals to the referees, opponent and Custos.

9.6. Preliminary examination

The Postgraduate Research Committee assigns, upon the proposal of the supervisors and the Professor for the appropriate subject, at least two referees for the thesis who must be familiar with the topic of the thesis and as a rule must at least have the qualifications of a docent. The referee must be from outside the candidate's faculty. For a justified reason the other referee can be a Docent from the University of Oulu if he/she is posted elsewhere. The referee may not be in a relationship denoted by Section 28 of the Administrative Procedure Act (434/2003) or in a dispute or other such relationship that will apparently endanger his/her impartiality. **The referee must be impartial with regard to the thesis and may not pursue cooperation with the doctoral candidate or close cooperation with the supervisor.** The referees issue their statements to the Faculty for the granting of the printing permission, in accordance with stipulations concerning preliminary examination.

The referees may demand factual or formal corrections or possible additional and control experiments before any final statement is submitted. The eventual statement should not contain any reservations but indicate either approval or disapproval. Thus the statement should not be conditionally favourable, but its presentation must be postponed until the thesis is in its final printing form.

The purpose of the preliminary examination procedure is to ensure before printing permission is granted that the manuscript meets the scientific and formal requirements set for it. In addition, the procedure usually improves the quality of the thesis. It is hoped in particular that the referees will indicate in their statement whether the research underlying the thesis is sufficient.

The following aspects should be considered in the statement:

1. General impression of the thesis

Evaluation of

- the content of the research, the author's independent contribution to the research, and the paper's points of departure and setting of research problems
- research methods used
- control and applicability of the research setting and the materials and methods used in the research as regards the solving of the stated problems
- significance of the thesis in the scientific development of the research field (especially novelty value and the practical applications and topics of further research resulting from the research)
- the candidate's ability to scrutinise the problem area theoretically
- the candidate's criticalness and ability to draw conclusions

The statement should be issued within two (2) months from the date on which the Postgraduate Research Committee appointed the referees. The author shall be given an opportunity to give his or her response to the referees' statement (Section 44 of the Universities Act 558/2009. Instructions approved by the Faculty must be followed in the preliminary examination (Appendix 2).

9.7. Granting of printing permission

The Postgraduate Research Committee grants the printing permission for the thesis on the basis of the referees' statements. In connection with granting the printing permission, and based on the proposal of the professor of the appropriate subject and the thesis supervisors, the Postgraduate Research Committee will appoint the professor of the appropriate subject or the supervisor of the thesis as the *Custos*, and the *opponent*. The *Custos and the opponent* must be at least *docents*. The *Custos* will act as the official representative of the Faculty in the public defence of the thesis. The *opponent* must be from *outside the faculty*. The referee cannot act as the opponent. The opponent may not be in a relationship denoted by Section 28 of the Administrative Procedure Act (434/2003) or in a dispute or other such relationship that will apparently endanger his/her impartiality. *The opponent must be impartial with regard to the thesis and may not pursue cooperation with the doctoral candidate or close cooperation with the supervisor.*

The publishing and printing of the thesis can commence when the Postgraduate Research Committee has granted the printing permission. Printing and publishing are discussed in more detail in Section 1

9.8. Public discussion

There are some practical arrangements before public discussion that the candidate must take care of himself/herself. For more information on theme, see Section 11 or contact publishing editor Kirsti Nurkkala (tel. +358-8-553 4098), the Postgraduate Student Affairs Office or the supervisor of the thesis.

The doctoral candidate shall agree the date for public discussion with the *Custos* and the opponent and report the date to the Faculty's Postgraduate Student Affairs Office.

As a rule, public discussion must take place at the premises of the University of Oulu or the Northern Ostrobothnia Hospital District in Oulu. By the Dean's decision, public discussion can also be arranged elsewhere if the work for the thesis was carried out in a unit outside the University of Oulu and the unit also pursues research and teaching in the subject.

9.9. Opponent's statement

The opponent's statement should be considered the final characterisation of the scientific value of the thesis. It should cover the following aspects:

- General evaluation of the organisation and presentation of the thesis, the quality of the printing and the candidate's personal contributions to carrying out the research
- Evaluation of the content of the research
- Evaluation of the public examination, especially the candidate's ability to defend the thesis and to scientifically outline the problem area and make generalising, critical conclusions about the research. The opponent may state the comments made by possible additional opponents and indicate his/her own assessments of them
- The opponent will propose the approval of the thesis after his/her statement.

- The opponent must issue his/her statement according to the instructions approved by the Faculty (Appendix)
- *The opponent's statement* must be delivered to the Faculty within *one month (1 month) from the public examination of the thesis*. The candidate has the right to express his/her opinion about the opponent's statement (Universities Act 558/2009, Section 44).

The Postgraduate Research Committee will decide on the approval of the thesis on the basis of the statement

9.10. Grading of thesis and thesis award

The Postgraduate Research Committee shall evaluate the thesis on the basis of statements submitted by the referees and the opponent.

There are three grades: **fail, pass and pass with honour**.

The last-mentioned award is only issued for exceptionally high-quality theses. The Postgraduate Research Committee may approve a thesis with the grade of pass with honour, if at least two out of three (referees and the opponent) are in favour of the grade.

To receive the grade, the thesis should represent the top 10% in its field, the results should be of international significance and the discoveries and conclusions new and profoundly change the earlier ideas or clinical practices.

If the person issuing the statement proposes the above grade, his/her statement must end with a short summary of the grounds on which he/she supports the issuing of the grade.

In addition, the Postgraduate Research Committee may award prizes for theses of exceptional quality at the annual Science Days event or in some other appropriate occasion .

10. PUBLICATION AND PUBLIC DISCUSSION

10.1. Publication of the thesis

The thesis can be published

- in the University's own series *Acta Universitatis Ouluensis*
- in some other scientific series
- as a separate volume that the candidate can publish at his/her own cost

Instructions for authors publishing in the Acta Universitatis Ouluensis series are found in the address <http://www.kirjasto.oulu.fi/assets/files/julkaisutoiminta/templates/ActaOulu2010.pdf>

The publishing instructions for the *Acta Universitatis Ouluensis* series briefly discuss the editing process in the order in which the material is prepared for publication, printing and distribution. The instructions also apply to other publications appearing in the series in addition to doctoral theses.

For instructions, contact editing manager Kirsti Nurkkala, tel. +358-8-553 4098,

email: acta.toimitus@oulu.fi, address Julkaisutoimikunta, PL 7500, 90014 Oulun yliopisto

If publishing in the *Acta Universitatis Ouluensis* series, the candidate must submit the thesis material to the editors 6 weeks before the date of public discussion at the latest. The printed thesis must be on public display 10 days before the public discussion. Here, the holiday period should be taken into consideration, as manuscripts will not be accepted in July so the candidate must complete the process before midsummer.

Publications appearing in the *Acta Universitatis Ouluensis* series are published at *Juvenes Print* - Tampere University Press Oy, which also offers layout services and accepts publications for sale. The address of Juvenes Print is Naulakatu 2, 33100 Tampere, tel. +358-3-3551 6597

If the candidate chooses to publish privately, he must obtain an ISBN number for the thesis from Helsinki University Library, e-mail: ISBN-keskus@helsinki.fi, Internet: <http://www.lib.helsinki.fi/>. Tel. +358-9-70844396

10.1.1. Publishing agreement

The publishing agreement is filled in and printed in two copies. The author of the thesis must confirm the information in the form in his/her Faculty. The form is signed by the Head of Education after which the form and the rest of the material are submitted to the secretary of the Publishing Committee.

By signing the publishing agreement, the author confirms that the material of the thesis is original and agrees that if he/she wishes to publish the thesis or parts thereof elsewhere, he/she must first receive a written permission to that effect from the Publishing Committee of the University of Oulu.

The publishing agreement form is found in the address

<http://www.kirjasto.oulu.fi/julkaisutoiminta/acta/sopimus.pdf>

If the thesis is published at the author's own cost or in a scientific series other than the Acta series, it is hoped that the information is printed on the thesis cover and title page according to Acta's instructions. (the information must include University of Oulu, Faculty of Medicine, department/clinic and collaborating parties).

10.1.2. Distribution

For doctoral thesis printed in the *Acta Universitatis Ouluensis* series, the University of Oulu shall pay the printing costs of 36 compulsory distribution copies and 15 copies to the author, i.e. altogether 51 copies. The author shall pay the printing of further copies as well as layout service and colour page costs, for example

Compulsory local distribution must be taken into consideration in the printing volumes for thesis published in the *Acta Universitatis Ouluensis* series and in other publications. The printing volumes are indicated in the publishing instructions of Acta Universitas Ouluensis at

<http://www.kirjasto.oulu.fi/assets/files/julkaisutoiminta/templates/ActaOulu2010.pdf>

Publications of the *Acta Universitatis Ouluensis* series are sold in bookshop Granum and web bookshop Juvenes.

10.1.3. Publicity and communications

To inform about public discussion in good time, the candidate is requested to **submit the candidate registration form and photograph** to the Public Relations Office **ten days before the occasion at the latest**.

> [Web form for drawing up a release](#)

Résumé

The résumé is included in the **registration form**. The résumé should be provided with a brief headline that indicates clearly the main result of the research. This should be as short as possible and worded so as to interest the general public, and will therefore often be quite different from the actual title of the thesis.

The résumé should state the problems studied in the research, the methods used and the results obtained in an easily comprehensible manner. The practical applications of the research should be emphasised as far as possible. As regards the results it is good to emphasize what new facts have been discovered in the course of the research, in other words one should clearly separate one's own observations and conclusions from those made earlier. In addition it is worth mentioning in particular those results that are likely to be of interest to the general public.

The mode of expression should be as clear as possible, with short sentences, and with foreign terms replaced by Finnish ones whenever possible. In fact relatively few scientific terms should be used in general, as the résumé is not intended for colleagues but for newspapers and magazines read by the public at large, the reporters on which are often unfamiliar with specialized branches of science). The avoidance of terms admittedly often leads to rather a general descriptive tone, but this is quite sufficient for the daily newspapers and keeps the résumé suitably concise.

The shorter and more poignant your review is, the better chance there is that it will be read right to the end and understood in the editorial departments of the media! This may even help it to gain more column space. (As more and more theses will be published in future and the number of reports in the media will decrease, the "fight" for publicity will probably become fiercer). Similarly, the importance of external appearance should not be underestimated, as a readable, correctly spelled, neatly produced text will facilitate the acceptance of your message.

You may have noticed that theses are often only commented on a few lines in the media. Why let reporters summarise what you have written while you can pick out yourself the most important points that you want to present to the general public! This also reduces the risk of misinterpreting what you have written.

[> Examples of résumés](#)

Media distribution

A release is prepared at the Public Relations Office that covers the Finnish Broadcasting Company (Yleisradio), local radio stations and TV channels, national and provincial newspapers, local papers and specialized magazines (Tiede 2000, Lääkärilehti, Tekniikka & Talous, Talouselämä etc.). Information on the discussion is also provided on the university [website](#) and in stakeholder magazine Aktuumi.

If the candidate wishes other media to be informed (certain magazines or the local newspaper of some other area, for example), this can be announced at tapahumia@oulu.fi. The Public Relations Office does not pass information to scientific journals. Similarly a separate direct agreement must be made with any newspaper or magazine to which the candidate wishes to send a more extensive article and/or a copy of the thesis itself.

Photographs

Photographs should be submitted to the Public Relations Office ten days before the examination of the thesis. The photograph can be sent as a high-resolution file to tapahumia@oulu.fi or as a paper copy to Viestintä, PL 8000, 90014 Oulun yliopisto. The University's internal address is 8VIEEST.

From the Public Relations Office, the photographs are delivered to Kaleva and Helsingin Sanomat. Photographs can also be sent to other papers on request.

It is absolutely essential to write the year and the name of the person concerned on the back.

Questions concerning communications on the public discussion of the thesis will be answered by Helena Sarmola, Public Relations Office, tel. 553 4101 , e-mail: [tapahumia\(at\)oulu.fi](mailto:tapahumia(at)oulu.fi)

10.2 Public discussion

The candidate should also read **Professor Seppo Lakovaara's text "Miten minusta tulee tohtori- väittelyyn liittyviä muodollisuuksia ja perinteitä" (How to Become a Doctor - Formalities and Traditions Associated with the Public Discussion of a Thesis)**, which is available at the University's website <http://www.hallinto oulu.fi/viestin/yliopistolaisille/neuvottohtoreille2001.htm>.

Seppo Lakovaara has written a brief report on the occasions and formalities associated with the public discussion of a thesis. The text includes a description e.g. about the traditional course of the public defence of thesis and the post-doctoral party, their arrangements and appropriate dressing. It is also a good idea to read the "**Kohti karonkkaa**" (**Towards the Post-Doctoral Party**) published by Duodecim.

Certain established customs and formalities are to be followed in the public defence of a thesis. They complement the regulated official stipulations regarding the examination of the thesis. Naturally, traditional customs change with time. The leading characters in the public discussion of the thesis should negotiate and agree on formalities, including the form of address (usually formal) and preliminary schedule (if possible).

The public defence of a thesis is a public event. The participants shall enter the hall with doctoral candidate leading, followed by the Custos and lastly the opponent. The audience shall stand up at this point. The candidate will be seated to the left of the Custos' and the opponent to the right.

The candidate, Custos and opponent are expected to wear evening dress (men with white tie and black waistcoat, women a black dress, but not long). The Custos and opponent, assuming they have a doctor's degree, should enter and leave the hall carrying their doctor's top hat. The hat should be placed on the table with the lyre insignia towards the audience for the duration of the discussion.

When all the participants have taken their places but are still standing, the Custos will open the examination with the words: "As the Custos appointed by the Faculty of Medicine of the University of Oulu, I declare the examination of the doctoral thesis submitted by (name and degree of the candidate) to have commenced." (The Custos may welcome the audience to the public discussion of the thesis and briefly present its subject. The Custos may also introduce the opponent and the doctoral candidate). Everyone shall then sit, except for the candidate.

The candidate gives his/her lectio praecursoria while standing. Containing an introduction to the main themes of the thesis and usually going beyond them, lectio praecursoria may not take no more than 20 minutes. The Doctoral candidate will start his/her presentation with "Mister (or Madame) Custos, Mister (or Madame) Opponent, Ladies and Gentlemen". Instructions regarding the content and nature of the lectio praecursoria may be given in advance by the Custos if need be.

The lectio praecursoria should end with the words: "I now request You Professor/ Docent/ Doctor....., as the opponent appointed by the Faculty, to put forward the comments and criticism that you consider appropriate upon reading my thesis."

The opponent will then stand and make a short statement dealing with the scientific status and significance of the topic of the thesis and other similar questions of general interest, after which both the opponent and the candidate will sit.

The opponent shall spend a maximum of four hours over the examination of the thesis, in order to leave sufficient time for any additional questions from the floor. If the examination seems likely to take more than four hours, there should be an interval, to be announced by the Custos. The whole occasion must not take more than six hours.

Upon the completion of the examination, the opponent and candidate will stand, and the opponent will make his final statement. The candidate will listen the statement while standing.

Remaining standing, the candidate will thank the opponent and then turn to face the audience and state: "I now request those present who have any comments to make on my thesis to address them to the Custos."

The Custos will then accept questions from the floor, ensuring that the candidate has an opportunity to reply immediately to each and that the comments remain on the subject. The examiner is also required to take note of these comments in his final written statement to the Faculty.

When there are no further questions or comments from the floor, the Custos shall stand and state: "I hereby declare the public examination of this thesis closed."

The participants will exit the hall in an opposite order.

11. REGULATIONS CONCERNING LICENTIATE THESES

For the licentiate degree, the student must show sufficient familiarity his/her research topic and ability to independently and critically apply the methods of scientific research.

Applicable parts of the regulations concerning doctoral theses can also be followed in the case of licentiate degrees.

Scientific publications on the same topic, or manuscripts approved for publication, in the numbers deemed sufficient by the University, or some other corresponding contribution that fulfils

the criteria for scientific work can also be accepted for the licentiate degree. The publications may also include joint publications, provided that the candidate's personal contribution can be demonstrated in their production.

When the postgraduate student and the supervisors of the licentiate thesis are of the opinion that the thesis is ready for examination, the postgraduate student must submit the following to the Office of the Faculty of Medicine

1. the licentiate thesis in three copies
2. an abstract of 1-2 pages
3. proposal for the examiner of the licentiate thesis

The *Dean* will assign two examiners to the work, who must submit a well-grounded written statement of the thesis after it has been discussed in the licentiate seminar. The examination must be carried out within two months. The supervisor of the licentiate thesis may not act as the examiner. Applicable parts of the instructions given to the referees and opponents of doctoral theses are followed in the examination of licentiate theses. The *Dean* will decide on the approval of the licentiate thesis on the basis of the examiners' statements.

12. SCIENTIFIC POSTGRADUATE STUDIES

The following regular courses are included in the Faculty postgraduate programme:

- Animal experimentation
- Computer-based statistical processing of material
- Health care administration and management (primarily for specialist and special dentist education)

- English for Medical Conferences
- Sources of medical information
- Basics of scientific communication
- Basic statistical methods in medicine
- Planning of research

Other scientific courses are also arranged in epidemiology, qualitative research methods and ethics of medicine etc.

Studies leading to a doctorate degree can also include courses within the national postgraduate study programme, those arranged by graduate schools, web courses and other scientific courses. More detailed information about course timetables, content etc. can be obtained from the Postgraduate Student Affairs Office (tel. 5375106 and 5375107) and from the Faculty website at <http://www.medicine oulu.fi/koulutustiedotteet.html>.

Information on seminars, meetings and other training occasions connected with field-specific education is announced by the various departments/clinics.

PRINCIPLES FOR MEASURING SCIENTIFIC POSTGRADUATE STUDIES

1. Postgraduate training seminars

- participating in a seminar (10 times/1.5 study credits)
- seminar paper (1/1.5 study credits)

2. International and national scientific activities

- - poster presented at a national conference, 1 study credit and verbal presentation 1.5 study credits
- - poster presented at an international conference, 1.5 study credits and verbal presentation 3.0 study credits

3. Scientific work carried out at a Finnish/foreign university/research institute, 1.5-18 study credits according to the supervisor's assessment

4. Writing a scientific publication

- - a scientific article approved for publication but not included in the doctoral thesis, 1.5-6 study credits; the supervisor will determine the length of the article according to difficulty and scope

5. Specialised courses in Finland and abroad connected with the field of research

-study credits according to participation

6. Scientific postgraduate courses, university pedagogical studies and language studies

-study credits according to course programme and participation

7. Degree examinations (licentiate examination)

-1.5-9 study credits according to the supervisor's assessment

The study measuring principles can be applied to postgraduate degrees awarded in the Faculty of Medicine.

The supervisor in particular, and the Committee for Postgraduate Education in connection with the approval of the teaching plan, shall ensure that the education constitutes a balanced whole that conforms to the objectives set for it.

13. POSTGRADUATE RESEARCH COMMITTEE

The term of office of the Postgraduate Research Committee is concurrent with that of the Faculty Board, i.e. four years. The Postgraduate Research Committee is summoned every 3 to 4 weeks during the terms.

The Committee's main duty is to support and counsel the research work done in the faculty and

- to develop the content and structure of academic postgraduate education
- to assume tasks concerning the right to pursue postgraduate studies
- to prepare study right decisions to the Dean
- to approve postgraduate study plans
- to assign supervisors and monitoring groups
- to register postgraduate students and theses
- to assign referees and grant the printing permission
- to assign the opponent and Custos and approve the thesis
- to award the prize for the thesis
- to arrange the Science Days

- to assume other tasks regarding scientific postgraduate studies and the follow-up of theses
- to plan, organise and approve scientific postgraduate courses
- to arrange national cooperation in postgraduate research education
- to handle questions regarding the candidate's legal safety, possible conflicts between the supervisor and author, and possible changes of supervisor.

14. REGULATIONS CONCERNING LEGAL RIGHTS

The most important regulations applying to the **legal rights** of postgraduate students are as follows:

The candidate shall be given the opportunity of contesting the statement of a referee, examiner or opponent regarding the doctoral or licentiate thesis before the final decision is reached on it.

The person concerned may prepare a correction request for the administrative body indicated by the University as regards the grading of the doctoral thesis or licentiate thesis within 14 days after the announcement of the decision.

As to the incapacity of the referee, examiner or opponent of a doctoral thesis or licentiate thesis, the provisions of Section 28 of the Administrative Procedure Act shall apply (Administrative Procedure Act 434/2003).

15. ETHICAL COMMITTEE

The ethical committees established in the various hospital districts operate under the Act on Medical Research 488 /1999 and its amendment 295/2004), Decree 986/1999 and its amendment 313/2004, decree of the Ministry of Social Affairs and Health 1396/2004, and other decrees governing the work of ethical committees. The Ethical Committee of the Northern Ostrobothnia Hospital District meets about once a month during term time. Application forms and instructions for the Ethical Committee's statement, and instructions concerning the research diary can be found under [tutkijalle](#) on the hospital district's website (<http://www.ppshp/>). Applications must be submitted to the secretary of the Ethical Committee Maija-Leena Pönkkö, tel.08 -3155181/040-7731529, <mailto:majaleena.ponkko@ppshp.fi>. Street address: PPSHP, eettinen toimikunta, hallintokeskus G 304, Kajaanintie 50, 90220 Oulu. (Postal address: PPSHP:n eettinen toimikunta, PL 10, 90029 OYS). The e-mail address of the Ethical Committee is eettinentoimikunta@ppshp.fi , to which e.g. statement applications and the researcher's note for matters issued to the Ethical Committee for its approval or for its information must be sent electronically in addition to a paper version.

Licence to perform experiments with animals

All animal experiments are subject to a licence. The national body issuing such licences is the Animal Experimentation Board (ELLA), whose preparation personnel are employed in Southern Finland State Administrative Agency. They prepare all permit applications for discussion in the board and distribute and archive the licence decisions. They are also responsible for all other information management tasks connected with animal experiments and for other country-wide

tasks assigned to Southern Finland State Administrative Agency in the Act on Animal Experimentation.

16. GRADUATE SCHOOLS

According to current science and research policy guidelines, doctoral studies are increasingly arranged within the framework of graduate schools and doctoral degree programmes. In addition to establishing an internationally consistent graduate scheme, the postgraduate education system seeks to develop theoretical and practical academic postgraduate education and to help candidates prepare their theses faster and more effectively. Graduate schools offer positions for postgraduate students, in which they can work on their theses full time and receive financial support to attend exchange schemes and to travel to meetings. The University of Oulu has graduate research schools financed either by the Ministry of Education or by the University itself. In addition, some of its postgraduate students study in national graduate schools. For further information on graduate schools and research units, see the university website at <http://www oulu.fi/tutkimus/index.html>

According to the strategy of the University of Oulu for 2010-2012, a single graduate school entitled University of Oulu Graduate School will be established instead of several schools. The new graduate school will cover all doctoral candidates and students in the international master programmes. The graduate school of the University of Oulu consists of several doctoral programmes and international master programmes. Its cooperation with other national and international actors will be developed.

The research priorities and development fields of the University of Oulu are:

Biosciences and health
 Information technology
 Cultural identity and interaction
 Environment, natural resources and materials, including steel research, and mining and quarrying

Development fields whose research profile will be developed are:

Business and economy
 Research-based teacher training

The strategy of the University of Oulu is available in the address

http://www.hallinto oulu.fi/suunnit/raportit/oy_strategia_2010-2012.pdf

17. INFORMATION ON SCHOLARSHIPS

Scholarships of the University of Oulu

http://www.hallinto oulu.fi/talous_ULK/Dokumentit_U/rahastot_ULK.htm

Academy of Finland:

<http://www.aka.fi/>

Scholarship programmes of the CIMO:

<http://www.cimo.fi/>

Scholarships of the Finnish Cultural Fund,

Scholarships of the Academy of Finland,

Apurahat ja opintotuki (Scholarships and Student Aid), a guidebook published by

the National Union of University Students in Finland (SYL):

<http://www.uta.fi/opiskelu/apurahat>

The University of Turku maintains a research aid register, which contains the basic details of more than 500 financiers supporting research carried out in different disciplines:

<http://www.utu.fi/hallinto/tutkimuspalvelut/turatiedotus.htm>

Information of research financing provided by Tekes (Finnish Funding Agency for Technology and Innovation):

<http://www.tekes.fi/>

Information on state subsidies and scholarships on the Ministry of Education website:

<http://www.minedu.fi/>

Information on EU programmes on Cordis website (Community Research and Development Information Service):

<http://www.cordis.lu/>

Information on fellowships and studying in United States on Fulbright website:

<http://www.fulbright.fi/>

A ppendix I

Government Decree on University Degrees 794/2004, issued in Helsinki on 19 August 2004

Chapter 1

General provisions

Section 1

Application

1. This Decree provides for lower and higher university degrees and scientific and artistic postgraduate degrees referred to in the Universities Act (645/1997). Professional postgraduate degrees awarded by universities come under separate statutes.

Section 2

Fields of education and responsibilities for provision of degree education

1. Attached to this Decree is a list of fields of education, degree names and universities which award the degrees.

Section 3

Provision of education leading to lower and higher university degrees

1. Education leading to lower and higher university degrees may be based on subjects or in the form of degree programmes. Education leading to a higher university degree built on a lower university degree or education of a corresponding level may also be arranged as a degree programme to which there is a separate selection.

2. Education leading to a higher education degree may also be arranged in international cooperation.

Section 4

Degrees taken in foreign languages

1. A university degree referred to in Section 9(3) of the Universities Act which has been taught and studied in a language other than Finnish or Swedish shall be given an English degree title in addition to the Finnish or Swedish title enumerated in the attached list.

Section 5

Extent of studies

1. The measure for the extent of studies shall be a credit unit. Courses shall be quantified according to the work load required. The average input of 1600 working hours needed for studies of one academic year shall correspond to 60 credits.

Section 6

Language proficiency

1. The student must demonstrate in studies included in education for a lower or higher university degree or otherwise that he/she has attained:

(1) proficiency in Finnish and Swedish which is required of civil servants in bilingual public agencies and organisations under Section 6(1) of the Act on the Knowledge of Languages Required of Personnel in Public Bodies (424/2003) and which is necessary for their field; and

(2) skills in at least one foreign language needed to follow developments in the field

and to operate in an international environment.

2. The provisions of subsection 1 do not concern a student who has been educated in a language other than Finnish or Swedish or a student who has been educated abroad. The language proficiency of such students shall be determined by the university.

3. For special reasons, the university may either totally or partially exempt a student from the requisite language skills referred to in subsection 1.

Chapter 2

Lower university degree

Section 7

Aims of the lower university degree

1. Studies leading to a lower university degree shall provide the student with:

(1) knowledge of the fundamentals of the major and minor subjects or corresponding study entities or studies included in the degree programme and the prerequisites for following developments in the field;

(2) knowledge and skills needed for scientific thinking and the use of scientific methods or knowledge and skills needed for artistic work;

(3) knowledge and skills needed for studies leading to a higher university degree and for continuous learning;

(4) a capacity for applying the acquired knowledge and skills to work; and

(5) adequate language and communication skills.

2. The education shall be based on research or artistic activity and professional practices.

Section 8

Extent of studies required for a lower university degree

1. Studies required for a lower university degree shall be 180 credits, unless otherwise provided below. The university must arrange the education to enable the student to complete the degree in three years of full-time study.

2. The extent of studies required for the degree of Bachelor of Fine Arts shall be 210 credits. The university must arrange the education to enable the student to complete the degree in three and a half years of full-time study.

Section 9

Structure of the lower university degree

1. Studies leading to a lower university degree may include:

- (1) basic and intermediate studies;
- (2) language and communication studies;
- (3) interdisciplinary programmes;
- (4) other studies; and
- (5) work practice for professional development.

2. The degree of Bachelor of Science in Pharmacy shall include a compulsory internship.

3. The extent of basic studies in the subject or a corresponding entity shall be a minimum of 25 credits. The extent of intermediate studies in the subject or a corresponding entity shall be a minimum of 60 credits. The intermediate studies in the major subject or a corresponding entity shall include a thesis of at least six and at most ten credits.

Section 10

Requisite components of the lower university degree

1. To be awarded a lower university degree, the student must complete basic and intermediate studies in the major subject or a corresponding entity and language, and communication studies.

2. The student must demonstrate that he/she has attained the objectives set for the degree, studies and thesis and the language proficiency referred to in Section 6. The student must write a maturity essay which demonstrates conversance with the topic of the thesis and skills in the use of Finnish or Swedish.

3. When a student is not required to have language proficiency referred to in Section 6(1), the university shall determine separately the language used in the maturity essay.

Section 11

Specialisation based on certain lower university degrees

1. Students holding the degree of Bachelor of Science in Pharmacy or an equivalent degree may study for a pharmaceutical specialisation. Specialisation studies in pharmacy comprise in-depth studies in the speciality, research on the speciality and guided work practice in the speciality. The aim of specialisation is good knowledge of the speciality and an ability to work independently in the speciality field.

Chapter 3

Higher university degree

Section 12

Aims of the higher university degree

1. The education shall provide the student with:

(1) good overall knowledge of the major subject or a corresponding entity and

conversance with the fundamentals of the minor subject or good knowledge of the

advanced studies included in the degree programme;

(2) knowledge and skills needed to apply scientific knowledge and scientific methods or knowledge and skills needed for independent and demanding artistic work;

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(3) knowledge and skills needed for independently operating as an expert and developer of the field;

(4) knowledge and skills needed for scientific or artistic postgraduate education; and

(5) good language and communication skills.

2. The education shall be based on scientific research or artistic activity and professional practices in the field.

Section 13

Extent of studies leading to a higher university degree

1. The extent of studies leading to a higher university degree shall be 120 credits, unless otherwise provided in this Section or in Section 14 below. The university must arrange the education to enable the student to complete the degree in two years of full-time studies.

2. The extent of studies required for a programme leading to the higher university degree which is geared to foreign students shall be a minimum of 90 credits. The university must arrange the education so as to enable a student studying full time to complete the degree in a time corresponding to its extent, nonetheless in no more than two academic years.

3. The extent of studies required for the degree of Master of Science in Psychology and the degree of Master of Art in Music shall be 150 credits. The university must arrange the education so as to enable the student to complete the degree in two and a half years of fulltime study.

4. The extent of studies required for the degree of Licentiate of Veterinary Medicine and the degree of Licentiate of Medicine shall be 180 credits. The university must arrange the education so as to enable the student to complete the degree in three years of full-time study.

Section 14

Arrangement and extent of education leading to the higher university degree which does not include the relevant lower university degree

1. In the fields of medicine and dentistry the university may arrange the education leading to the higher university degree without including a lower university degree in the education.

2. The extent of studies required for the degree of Licentiate of Medicine shall be 360 if the university organises the education leading to the higher university degree so that it does not include a lower degree. The university must arrange the education so as to enable the student to complete the degree in six years of full-time study.

3. The extent of studies required for the degree of Licentiate of Dentistry shall be 300 if the university organises the education leading to the higher university degree so that it does not include a lower degree. The university must arrange the education so as to enable the student to complete the degree in five years of full-time study.

Section 15

Structure of the higher university degree

1. The studies leading to the higher university degree may include:

- (1) basic and intermediate studies and advanced studies;
- (2) language and communication studies;
- (3) interdisciplinary study programmes;
- (4) other studies; and
- (5) internship improving expertise.

2. Studies for the degrees of Licentiate of Medicine, Licentiate of Dentistry and Licentiate of Veterinary Medicine, the degree of Master of Science in Pharmacy and the degree of Master of Science in Psychology, and education in social work belonging to the field of social sciences include compulsory internships.

3. Basic studies and intermediate studies shall have the minimum extents referred to in Section 9(2). The extent of advanced studies shall be a minimum of 60 credits. The major subject or a corresponding entity included in the degree or the advanced studies of a degree programme shall include a thesis of at least 20 and at most 40 credits.

Section 16

Requisite components of the higher university degree

1. To be awarded a degree, the student must complete advanced studies in the major subject or a corresponding entity or the advanced studies of a degree programme and the internship supervised by the university possibly included in the degree. The student must also complete sufficient studies in minor subject(s), unless these have been completed in education leading to a lower university degree.

2. The student must demonstrate that he/she has attained the objectives set for the degree, studies and thesis and the language proficiency referred to in Section 6. The student must write a maturity essay which shows command of the topic of the thesis and of the Finnish or Swedish language.

3. The student need not demonstrate command of the Finnish or Swedish language in the maturity essay included in the higher university degree if he/she has demonstrated his/her command of the language in a maturity essay included in a lower university degree studied in same language.

4. When a student is not required to have the language proficiency referred to in Section 6(1), the university shall determine separately the language of the maturity essay.

Section 17

Adherence to the statutes of the European communities

1. The provision of education leading to the degrees of Licentiate of Veterinary Medicine, Licentiate of Medicine and Licentiate of Dentistry, the degree of Master of Science in Pharmacy and the degree of Master of Science in Architecture, and the education leading to a lower university degree on which they are based must comply with the following statutes of the European Communities concerning the minimum level of education:

- (1) Council Directive 78/687/EEC concerning the coordination of provisions laid down by law, regulation or administrative action in respect of the activities of dental

Practitioners

(2) Council Directive 78/1027/EEC concerning the co-ordination of provisions in respect of the activities of veterinary surgeons

(3) Council Directive 85/384/EEC of 10 June 1985 on the mutual recognition of diplomas, certificates and other evidence of formal qualifications in architecture, including measures to facilitate the effective exercise of the right of establishment and freedom to provide services

(4) Council Directive 85/432/EEC concerning the coordination of provisions laid down by Law, Regulation or Administrative Action in respect of certain activities in the field of pharmacy, and

(5) Council Directive 93/16/EEC of 5 April 1993 to facilitate the free movement of doctors and the mutual recognition of their diplomas, certificates and other evidence of formal qualifications

Chapter 4

Provisions concerning teacher education

Section 18

Objective of teacher education

1. A special aim in teacher education provided by universities is to equip the student with knowledge and skills for independent work as a teacher, a counsellor and an educator.

Section 19

Studies in teacher education

1. The studies included in teacher education shall be

(1) studies providing professional competence for posts in early education and for pre-primary education;

(2) multidisciplinary studies in the subjects and cross-curricular themes taught in basic

education which provide professional competence for the teaching of the core subjects included in the basic education core curriculum under Section 11 of the Basic Education Act (628/1998);

(3) studies providing professional competence for special-needs education;

(4) studies providing professional competence for guidance counselling;

(5) teachers' pedagogical studies, which are didactically oriented studies in education

science comprising guided teaching practice and in which the student can specialise in basic education, upper secondary education, vocational education and training or adult education; and,

(6) in subject teacher education, studies in the teaching subject, which are studies

promoting the command of a subject included in basic education, upper secondary education or other education.

2. Studies referred to in paragraphs 1-5 of subsection 1 above shall be studies of a

minimum of 60 credits in extent which are provided by the universities with responsibility for the field of education science. The teaching practice referred to in paragraph 5 of the said subsection shall be carried out in a university practice school, other educational institution approved by the university or in some other manner approved by the university.

3. The studies in the teaching subject referred to in paragraph 6 of subsection 1 above shall be basic, intermediate and advanced studies in the major subject or a corresponding entity included in the higher university degree and basic and intermediate studies in another subject or in a corresponding entity.

Section 20

Structure of teacher education

1. Education leading to the degree of Master of Science in Education may include class teacher education, special-needs teacher education and guidance counsellor education referred to in Section 19(1). Some of these studies may be completed in education leading to the degree of Bachelor of

Science in Education, which forms the basis for the Master's degree. Education leading to the degree of Bachelor of Science in Education may include kindergarten teacher education.

2. Kindergarten teacher education shall include studies preparing for posts in early

education and for pre-primary education referred to in Section 19(1), class-teacher

education shall include interdisciplinary studies in the teaching subjects and crosscurricular themes, special-needs teacher education shall include studies providing

professional competence for special-needs education, and guidance counsellor education shall include studies providing professional competence for guidance counselling. Teachers' pedagogical studies referred to in the same subsection shall be incorporated in all the teacher education listed above, with the exception of kindergarten teacher education.

3. The teacher education studies referred to in subsection 2 above may also be

incorporated into other applicable lower and higher university degrees or they may also be taken as non-degree studies after graduation.

4. Education leading to the higher university degree may include subject teacher education, which comprises studies in one or two teaching subjects referred to in Section 19(1), and teachers' pedagogical studies. The studies may be taken either as part of a degree or as non-degree studies. Some studies included in subject teacher education may be taken in education leading to the lower university degree, on which the higher university degree is based.

Chapter 5

Scientific and artistic postgraduate education

Section 21

Objectives of scientific and artistic postgraduate education

1. The aim of postgraduate education is that the student:

(1) becomes well-versed in his/her own field of research and its social significance and gains knowledge and skills needed to apply scientific research methods independently and critically and to produce new scientific knowledge within his/her field of research;

(2) becomes conversant with the development, basic problems and research methods of his/her own field of research; and

(3) gains such knowledge of the general theory of science and of other disciplines relating to his/her own field of research as enables him/her to follow developments in them.

2. In the field of art and design, the aim of postgraduate education may be, in addition to the aims listed in subsection 1, that the student gains knowledge and skills for

independently conceiving methods of artistic creation or creating products, objects or works which fulfil high artistic demands.

3. In the fields of fine arts, music, and theatre and dance, the aim of postgraduate education may, in addition to or instead of the aims referred to in subsection 1, that the student gains knowledge and skills for independently conceiving methods of artistic creation or products or transactions which fulfil high artistic demands.

Section 22

Requisite components of the doctorate degree

1. To be awarded a doctorate, the student must:

- (1) complete the required postgraduate studies;
- (2) demonstrate independent and critical thinking in the field of research; and
- (3) write a doctoral thesis and defend it in public.

2. In the fields of fine arts, music, art and design, and theatre and dance, a student admitted to postgraduate education may demonstrate in public the knowledge and skills required by the university.

3. As a doctoral thesis may also be approved a number of scientific publications or manuscripts vetted for publication deemed sufficient by the university which deal with the same set of problems and a paper summarising the findings or some other work which

meets corresponding scientific criteria. The publications may include co-authored publications if the author's independent contribution to them can be demonstrated.

Section 23

Requisite components of the licentiate degree

1. A student admitted to postgraduate education may be awarded the licentiate degree when he/she has completed the part of the postgraduate studies assigned by the university and the specialisation education possibly included in the degree.

2. The licentiate degree shall include a licentiate thesis, in which the student demonstrates good conversance with the field of research and the capability of independently and critically applying scientific research methods.

3. In the field of music and in the field of theatre and dance, the licentiate degree may include a public demonstration of knowledge and skills, instead a licentiate thesis.

4. As a licentiate thesis may also be approved a number of scientific publications or manuscripts vetted for publication deemed sufficient by the university which deal with the same set of problems and a paper summarising the findings or some other work which meets corresponding scientific criteria. The publications may include co-authored publications if the author's independent contribution to them can be demonstrated.

Section 24

Specialisation included in the licentiate degree

1. A licentiate degree completed in postgraduate education may also include specialisation. In this case the education includes systematic theoretical and practical familiarisation with the speciality, a licentiate thesis on the speciality and guided work practice in the field of specialisation. The aim of the specialisation included in the licentiate degree is that the student becomes conversant with the speciality and acquires an ability to work independently in his /her own field of specialisation.

Chapter 6

Miscellaneous provisions

Section 25

Credit transfer

1. In degree studies the student may count studies completed in a Finnish or foreign university or some other educational institution towards the degree and replace studies included in the degree with other studies of a corresponding level, as specified by the university. At the discretion of the university, the student may also count towards the degree and replace studies included in the degree with knowledge demonstrated in some other manner.

Section 26

Diplomas

1. The university shall issue to the student a diploma on the completion of a lower or higher university degree completed, which must indicate:
 - (1) the name of the degree and the field of education;
 - (2) the major subject or a corresponding entity or the degree programme;
 - (3) possible specialisation included in the degree and the speciality;
 - (4) the main content of the degree; and
 - (5) the language proficiency demonstrated by the student; the recording of the language proficiency shall take account of Section 19 of the Government Decree on the Demonstration of Proficiency in the Finnish and Swedish Languages in Civil Service (481/2003).
2. The diploma for a postgraduate university degree shall come under the provisions of subsection (1)-(4).
3. On the student's request, the university shall issue a certificate of completed studies while the student still studying.
4. The university shall issue a Diploma Supplement intended for international use to a person who has completed a degree or studies at the university. The Diploma Supplement shall provide sufficient information about the university and about the studies or study attainments recorded in the diploma or certificate, and about their level and status in the education system.
5. A university in which it is possible to complete a study attainment included in the teacher education referred to in Section 19 may upon request issue a certificate indicating that the student has demonstrated that he/she has acquired knowledge and skills equivalent to the study attainment in a manner other than the studies specified in the statutory competence requirements. Where needed, the university may make the issuing of the certificate conditional on the applicant's completing supplementary studies.

Section 27

Graduate professional titles

1. The university may entitle:

(1) a person with the degree of Master of Science in Economics and Business

Administration to use the title of *ekonomi*;

(2) a person with the degree of Master of Science in Agriculture and Forestry to use the title of *agronomi* or *metsänhoitaja*;

(3) person with a Diploma in Fine Arts awarded under the repealed Decree concerning the Lower and Higher University Degree in Fine Arts (367/1993) to use the title of *kuvataiteen kandidaatti* and a person with a Degree in Fine Arts awarded under the said Decree to use the title of *kuvataiteen maisteri*; and

(4) a person who has been awarded a higher university degree called *kandidaatti* to use the title of *maisteri*.

Section 28

Development of education and degrees

1. The university shall have the duty constantly to evaluate and develop degrees, degree studies and teaching. Attention shall be especially paid to the quality of degrees, instruction, guidance counselling and studies, to educational needs in society, to the national and international equivalence of degrees and studies, and to the effectiveness of education.

Chapter 7

Coming into force and transitional provisions

Section 29

Coming into force

1. This Decree will come into force on the first of August 2005.

2. This Decree shall repeal the following Decrees with subsequent amendments:

(1) Decree concerning Degrees in Veterinary Medicine (298/1978) issued on the 21st of April 1978;

(2) Decree concerning Degrees in Pharmacy (246/1994) issued on the 30th of March 1994;

(3) Decree concerning the Degree of Doctor of Philosophy (1279/1991) issued on the 25th of October 1991;

(4) Decree concerning Degrees in Dentistry (290/1976) issued on the 26th of March

1976;

(5) Decree concerning Degrees in the Humanities and the Natural Sciences (221/1994) issued on the 18th of March 1994;

(6) Decree concerning Degrees in Educational Science and Teacher Education

(576/1995) issued on the 21 of April 1995;

7) Decree concerning Degrees in Economics and Business Administration (139/1995) issued on the 31st of January 1995;

8) Decree concerning Degrees Awarded by the Academy of Fine Arts (381/1997)

issued on the 25th of April 1997;

9) Decree concerning Degrees in Sport and Health Sciences (327/1994) issued on the 22nd of April 1994;

10) Decree concerning Degrees in Medicine (762/1975) issued on the 26th of September 1975;

11) Decree concerning Degrees in Agriculture and Forestry (214/1995) issued on the 17th of February 1995;

12) Decree concerning Degrees in Law (86/1996) issued on the 12th of February 1996;

13) Decree concerning Degrees in Psychology (318/1996) issued on the 3rd of May 1996;

14) Decree concerning Degrees awarded by Sibelius Academy (148/1995) issued on the 3rd of February 1995;

15) Decree concerning University Degrees in Art and Design (440/1994) issued on the 3rd of June 1994;

16) Decree concerning University Degrees in Theatre and Dance (216/1995) issued on the 17th of February 1995;

17) Decree concerning Degrees in Technology (215/1995) issued on the 17th of February 1995;

18) Decree concerning Degrees in Theology (517/1995) issued on the 7th of April 1995;

19) Decree concerning Degrees in Health Sciences (628/1997) issued on the 19th of June 1997; and

20) Decree concerning Degrees in Social Sciences (245/1994) issued on the 30th of March 1994.

3. Nonetheless, the following Sections of the Decrees listed in subsection 1 shall continue to apply:

(1) Section 5 and Section 14a of the Decree concerning Degrees in Pharmacy;

(2) the Appendix to and Section 14 a of the Decree concerning Degrees in the Humanities and the Natural Sciences;

(3) the Appendix to the Decree concerning Degrees in Educational Science and Teacher Education;

(4) Section 3 of the Decree concerning Degrees Awarded by the Academy of Fine Arts;

(5) Section 14 of the Decree concerning Degrees in Psychology;

- (6) Section 3 of the Decree concerning Degrees awarded by Sibelius Academy;
- 7) Sections 5 and 6 of the Decree concerning University Degrees in Art and Design;
- 8) Section 5 of the Decree concerning Degrees in Technology;
- 9) Section 10 of the Decree concerning Degrees in Health Sciences;
- 10) Section 4a as concerns educational responsibilities in social work and Section 14 a of the Decree concerning Degrees in Social Sciences.

Section 30

Status of students

1. A student who is studying for a degree under a Decree repealed under Section 29 when this Decree comes into force shall have the right under Section 20 of the Act Amending the Universities Act (715/2004) to transfer to studies governed by this Decree or to continue studying under the repealed Decree.
2. The student may count studies completed under the repealed Decree towards a degree governed by this Decree, as specified by the university.

Section 31

Transitional provision concerning degree names in law

1. The provisions in Acts or other statutes concerning the degree of Candidate of Laws shall also concern Master of Laws after this Decree comes into force.

Section 32

The title of Candidate of Medicine and Candidate of Dentistry

1. A student in medicine may still be awarded the title of Candidate of Medicine referred to in Section 17(3) of the Decree concerning Degrees in Medicine, provided that all the universities which have been assigned responsibility for medical education arrange education leading to the degree of Licentiate of Medicine without the intermediate lower degree included in the education.
2. A student in dentistry may still be awarded the title of Candidate of Medicine referred to in Section 17(4) of the Decree concerning Degrees in Dentistry, provided that all the universities which have been assigned responsibility for dentistry education arrange education leading to the degree of Licentiate of Dentistry without the intermediate lower degree included in the education.

Helsinki 19 August 2004

Tuula Haatainen, Ministry of Education

Markku Mattila, Director

Appendix 2

Instructions concerning the statements of the referee and opponent

The purpose of the preliminary examination procedure is to ensure before printing permission is granted that the manuscript meets the scientific and formal requirements set for it and that its scientific quality is sufficient. At this point, the Faculty and the referees appointed by it can contribute to the quality of the thesis or propose its rejection. Therefore, it is very important that preliminary examination is conducted carefully and that the author is asked to make all the necessary corrections and possible additional and control experiments before any final statement is submitted. **The statement should not contain any reservations but indicate either approval or disapproval.** Its presentation should be postponed until the thesis has been completed or its formal deficiencies have been eliminated. The statement must be presented *within two months* from the date on which the Faculty Board appointed the referees.

The following aspects should be considered in the referee's statement:

1. General impression of the thesis

A short description of the scientific content of the thesis and of its scientific level. *The thesis should show the author's ability to independently and critically apply the methods of scientific research and in-depth familiarity with the research topic, the related disciplines and general theory of science, and ability to independently generate new information.*

2. Topic and question setting

- - originality and scientific value of the research topic
- - *what is known of the research topic and what is the current opinion*
- - *what new information the thesis adds to the existing knowledge*
- - is the topic of relevance and topical interest in the field
- - is the question setting logical and scientifically relevant

3. Material and methods

- - what is the candidate's *independent role in planning the work*, collecting material and making preliminary observations and in their further processing
- - has the material been collected in a scientifically competent manner
- - is the material suitable for addressing research problems
- - are the methods of relevance in view of the material and *the research problem*
- - have new methods been developed in the course of the research

4. Results and conclusions

- - an assessment of the reliability and scientific relevance of the observations made

- - does the research involve the confirmation of findings made elsewhere or do the results include new findings and if so, what is their scientific importance
- - are the conclusions drawn on the basis of the results justified
- - have the results been processed and presented properly and are the statistical and *other* methods suitable in view of the research problem and material

5. Organisation and presentation of the thesis

- - an assessment of the composition, structure and scope of the thesis and its use of intermediate headings
- - an assessment of the scientific style, language and form of the thesis

6. Literature review

- - is the scope and content of the literature review sufficient
- - are the references comprehensive and of topical interest
- - candidate's familiarity with literature in the field and his/her *ability to express its key findings*
- - ability of the candidate to critically master field-specific literature and *to connect his/her own research with the existing knowledge*

7. Maturity shown in the discussion part

- - relevance, criticalness and logic of the discussion part
- - are the conclusions drawn in correct relationship with the setting of research questions and the results of the thesis, *their scientific and practical importance and previous knowledge in the field*
- - an assessment of whether the candidate has been able to link his/her results with the existing knowledge and to develop new research topics on the basis of the results
- - obtaining an impression of the candidate's maturity as a researcher and *an ability to synthesise his/her research topic*

8. Summary

It is hoped that the referee's statement ends with a brief summary including the following parts:

- - a brief description of the nature of the research
- - *a description of the researcher's own contributions*
- - the most important results and merits
- - quality of the manuscript
- - detected defects and possibilities to correct them
- - opinion about whether the thesis can be printed
- -

The referee can negotiate with the candidate about minor defects and how they should be corrected. If the scientific level of the manuscript is insufficient or the detected formal and content defects are considerable and concern important parts of the thesis (e.g. the reliability of methods), the referee should not support the printing of the thesis in his/her statement to the Faculty, which will then decide on further actions. The candidate must be given the opportunity to contest the referees' statements.

II INSTRUCTIONS CONCERNING THE OFFICIAL OPPONENT'S STATEMENT

The opponent shall follow the Faculty's special instructions, in which the formalities of public discussion are described, in the public discussion of the thesis.

The Faculty does not limit the issues to which the opponent can or may pay attention to in his/her statement or in public discussion of the thesis.

If there are additional opponents in the public discussion, the key content of their speeches should be recorded in the statement.

The opponent's statement consists of assessing the thesis manuscript and the public discussion of the thesis. The opponent's statement should be considered the final characterisation of the scientific value of the thesis.

When assessing the thesis, the opponent should pay attention to the aspects mentioned in instructions concerning the opponent's statement (Sections 1-8).

The written statement submitted by the opponent should provide an evaluation of the scientific importance of the thesis and include a brief description and assessment of its public discussion and of the speeches given by other persons in the occasion.

The opponent's statement should end with a summary.

The statement should state clearly

- - whether the scientific level of the thesis is sufficient
- - whether the research topic was provided by the author himself/herself
- - whether the question is complementing earlier scattered, uncertain findings or whether the thesis introduces something new to the discipline concerned
- - whether the thesis is a personal, balanced whole in terms of its form and scientific method

The opponent should point out in particular if the thesis contains findings that are important to the research field or are of major international importance.

If the opponent proposes rejection of the thesis in his/her statement or if any of the Faculty members requires rejection either on the basis of the opponent's comments or on other written grounds, the candidate must be given the chance to contest the opponent's comments in writing within the period of time set by the Faculty.

The opponent must submit his/her statement within ***one month*** from the public discussion of the thesis.

III GRADING OF THE THESIS

The Faculty Board shall evaluate the thesis on the basis of the opponent's statement. There are three grades: **fail**, **pass** and **pass with honour**. The last-mentioned award is only issued for exceptionally high-quality theses, which make up some 10 % of all the theses approved by the Faculty . The Faculty Board may approve the thesis with the grade of pass with honour upon the proposal of the Postgraduate Research Committee, if at least two out of three (referees and the opponent) are in favour of the grade. To receive the grade, the thesis should represent the top 10% in its field, its results should be of international significance and the discoveries and conclusions should be new and profoundly change the earlier ideas or clinical practices . If the person issuing the statement proposes the above grade, his/her statement must end with a short summary of the grounds on which he/she supports the issuing of the grade.

The Faculty Board may also award 1-2 prizes per year for **theses of exceptional quality**. The prize can only be awarded to a thesis fulfilling the criteria set .

The Postgraduate Research Committee prepares proposals for candidates to the award on the basis of the referees' and opponent's statements or some other means they consider suitable .

INSTRUCTIONS TO REFEREES AND THE OPPONENT FOR EVALUATING THE SCIENTIFIC LEVEL OF THE THESIS

The following instructions are intended for referees and the opponent in order to help them provide a statement and harmonise the evaluation procedure.

A QUESTION SETTING AND RESEARCH PLAN

1= There is no exact question setting or it is not scientifically relevant. The research setting has been planned incorrectly so it cannot address the questions asked.

2= Question setting is not based on scientific contemplation or a critical selection process. In a typical case the researcher has come up with a research method or fairly broad patient data, for example, and he/she then carries out the research without indicating any creative, original grounds for the research.

3= The research is based on an original idea, which is logical and medically relevant.

4= The point of departure of the research is resourceful and based on creative, fruitful thought.

5= The point of departure of the research is particularly resourceful, based on fruitful thought and boldly challenges previous ideas in the research field.

B MATERIAL AND METHODS

1= The methods used are not suitable to the material under investigation but provide incorrect or evidently insufficient answers to the question setting. The material is biased and the results are misleading.

2= The methods used are suitable for investigating the phenomenon under investigation. However, there is no originality in applying the methods, and the research material is narrow.

3= A generally used method has been essentially improved or changed, as a result of which it lends itself especially well to the research in question.

4= A new research method was developed in the course of the research process.

5= A new research method representing a new dimension in terms of its idea or implementation was developed in the course of the research process.

C PERSONAL CONTRIBUTION

Any material collection conducted by the researcher himself/herself, such as patient examination or carrying out a laboratory experiment, is considered personal contribution. The collection of material by auxiliary personnel (a colleague or laboratory assistant) shall also be regarded as the author's personal contribution, provided that

he/she is profoundly familiar with the methods, instructs the auxiliary personnel in their use and supervises the performance of the work.

1= The candidate's personal contribution in collecting the research material has been little or non-existent.

2= The candidate has personally acquired some of the results but for other parts consulted researchers who were already using suitable methods and who collected some of the material.

3= The candidate has acquired a major part of the research results through his/her own research efforts also for that part of the research in which he/she was assisted by other researchers. The candidate has personally explored each research method to the extent that he/she masters them in practise.

4= The candidate is profoundly familiar with all the methods and they have been implemented by him/her or as a result of work personally supervised by him/her.

5= The candidate is profoundly familiar with each method and their practicability and the methods have been implemented either by him/her or as a result of work personally supervised by him/her.

D RESULTS

1= The results of the thesis are consistent with and confirm earlier ideas.

2= The results of the thesis complement and specify earlier ideas that were uncertain and/or scattered.

3= The thesis introduces new ideas or information in the research field.

4= The thesis includes important and significant findings.

5= The thesis includes crucially important findings that are also significant internationally.

E KNOWLEDGE OF THE RESEARCH FIELD

The candidate's knowledge of the research field of the thesis shows in the manuscript, especially the literature review, but also in the discussion taking place in the public examination of the thesis

1= There are major defects or material misunderstandings in the topic of the thesis.

2= The candidate's knowledge covers the topic though it is only passive and based on literature.

3= The candidate critically masters the information and literature of the topic and has formed a logical picture of the merits and weaknesses of earlier publications.

4= The candidate has such broad knowledge of the topic that he/she can adjust or supplement the prevailing ideas.

5= The candidate has such broad knowledge of the topic that he/she can essentially refute, change or broadly supplement the prevailing ideas.

F DISCUSSION AND CONCLUSIONS

The candidate has the ability to critically assess his/her research results, as reflected by his/her thesis and its public discussion. The discussion and conclusions show that the candidate is capable of critical analysis, scientific honesty and academic realisation.

1= The thesis lacks a general discussion and/or conclusions, or the section named as such proves to be mere repetition of the summary or the literature review.

2= General discussion lists the author's results and corresponding values from earlier publications. The conclusions do not answer the questions set.

3= The candidate compares his/her research critically with earlier literature, considering differences and recognising weaknesses and other issues in his/her own research and earlier investigations. The conclusions are in line with the results and are scientifically well grounded.

4= The candidate is capable of creating a synthesis of the current state of the research problem in the light of his/her thesis. The conclusions have been drawn critically.

5= The candidate is capable of providing a creative synthesis of the current state of the research problem and pointing out fruitful paths for further research. The conclusions have been drawn up critically.

Lääketieteellinen tiedekunta

PL 5000

90014 OULUN YLIOPISTO

We kindly request referees and opponents to fill in this assessment form and attach it to their statements.

THESIS ASSESSMENT SUMMARY TABLE

Name of candidate _____

SUMMARY TABLE (see instructions)

2.....3.....4.....5 (highest grade)

A PROBLEM SETTING

B MATERIAL AND METHODS

C PERSONAL CONTRIBUTION

D RESULTS

E KNOWLEDGE OF THE RESEARCH FIELD

F DISCUSSION AND CONCLUSIONS

PROPOSED GRADES

Pass with honour

Pass

Fail

Date _____

Signature _____

Name in block letters

Please fill in and return this form to the Postgraduate Student Affairs Office together with the referee's and opponent's statement.

APPENDIX TO THE REFEREES'/OPPONENT'S STATEMENT:

PROPOSAL TO APPROVE THE THESIS WITH THE GRADE "PASS WITH HONOUR"

Name of candidate _____

Name of thesis

According to the provisions of the Faculty, there are three grades that can be awarded for doctoral theses: pass with honour, pass and fail. The first-mentioned award is only issued for exceptionally high-quality theses.

I propose the grade "pass with honour" for the aforementioned thesis.

Grounds for issuing the grade:

date **referee's/opponent's signature**

APPENDIX TO THE REFEREE'S STATEMENT

The referee of the thesis is asked to answer the questions of this form and attach the form to his/her statement in addition to his/her written statement. Please state grounds to the answers in the actual statement, where necessary.

Referee's statement issued by _____

Author of thesis _____

Name of thesis _____

1. The candidate has presented his/her personal contribution in the writing of joint publications. His/her personal contribution is:

sufficient

insufficient

no joint publications (monography)

1. The candidate has provided an account of whether any of the publications in the thesis have been or will be used as part of the theses of other researchers. The publications are:

The publications have been used/will be used in the following doctoral thesis/theses:

The use of the publications in view of the thesis examined is:

acceptable

not acceptable

no joint publications (monography)

1. The candidate has made all the changes to the thesis that I have required. I have seen and approved the final corrected version:

yes

no

1. I propose the granting of a printing permission unconditionally

yes

no

Date _____ / _____ / _____

Referee's signature

Please return this form together with the referee's statement.

Opintojaksojen kuvaukset