

Institute of Basic Medical Sciences,
College of Medicine, NCKU

2020-2021

Ph.D. Student Handbook



Contents

Organizational Regulations	1
Ph.D. Student Study Flow Chart	2
Course Requirements.....	3
Recognized enforcement rules for advisors of Ph.D. students.....	4
Methods for Ph.D. students applying for a change of advisor	5
Implementation policy for Research Proposal and Progress Report for Ph.D. students	6
Guidelines for Ph.D. students writing Research Proposal and Progress Report ..	9
Check List for Research Proposal	10
Implementation methods for qualification exam for Ph.D. degree candidates ..	12
Notes of Guidance for Ph.D. students applying for qualification examinations	13
Implementation method for Ph.D. degree examination	14
Common guidelines for students applying for Ph.D. degree examination.....	15
Procedure and method for employing committee members for degree examination of Ph.D. students.....	16
Appendices.....	17

Organizational Regulations

February 25, 2000; September 2002; October 17, 2003; November 6, 2004

1. In order to integrate the Master's programs of the College of Medicine at National Cheng Kung University (hereinafter the College) (existing Master's programs in Biochemistry and Molecular, Pharmacology, Physiology, Microbiology & Immunology, Molecular Medicine, Cell Biology & Anatomy, and Medical Laboratory Science and Biotechnology) and the personnel and material resources from various disciplines, and develop talent for Ph.D.-level research in Basic Medicine, the Ph.D. program of the Institute of Basic Medical Sciences (herein after the Ph.D. program) is hereby established.
2. College faculty consists of full-time teaching staff with a minimum rank of Assistant Professors from the Institute of Basic Medical Sciences, the existing Master's programs, the Department of Parasitology, and the Department of Pathology. The Institute of Basic Medical Sciences actively seeks applications from particularly outstanding and enthusiastic teachers for its positions, as well as accepts applications from qualified teachers. After applicants receive approval from the Secretariat Office, they are assigned responsibility for providing academic supervision of the students at the Institute.
3. The Director of the Institute is elected in accordance with the Election Procedures for the Director of the Institute of Basic Medical Sciences in order to oversee the affairs of the Institute.
4. The Ph.D. program should establish a Consulting Committee consisting of two or three members elected by the Dean of the College. The Consultative Committee has the following functions:
 1. Provision of consultation on the affairs of the Institute.
 2. Formulation of education policies.
 3. Development of courses.
 4. Determination of thesis advisers for graduate students.
 5. Coordination between graduate students and faculty to resolve difficulties.
 6. Other important general policy matters.
5. The Ph.D. program should establish a Thesis Counseling Committee for each student before the end of the first year, consisting of three to five members. The Director of the Institute shall select faculty members specializing in relevant fields to serve on each Counseling Committee in consultation with the thesis adviser and the Consulting Committee, and nominate one committee member as the convener (the thesis adviser may not serve as the convener). The Committee shall meet between 1 to 2 times a year and assess the course content, progress of the Ph.D. research project, subjects for qualification examination, and theses of graduate students. The Committee should provide a completed Research Proposal Evaluation Form, Progress Report Evaluation Form, and Thesis Evaluation Form to the Institute for filing.
6. Ph.D. students enrolled in the program should complete the Qualification Examination organized by the Ph.D. Candidate Qualification Examination Committee convened by the Director of the Institute. Ph.D. students who have passed the Qualification Examination should be put forward as Ph.D. Candidates by the Thesis Counseling Committee. Measures for the implementation of the Ph.D. Candidate Qualification Examination shall be established separately.
7. The Ph.D. program shall establish a Ph.D. Degree Examination Committee in accordance with University regulations. Ph.D. Candidates who have passed the examination shall be conferred a Ph.D. Degree. The implementation method for Ph.D. Degree Examination shall be established separately.
8. These Measures have been approved by the executive meeting, and shall be implemented after their report to the Academic Affairs Division. Revisions shall be dealt with in the same manner.

Ph.D. Student Study Flow Chart

June 5, 2006; Revised December, 2009; Revised April, 2013; Revised March, 2016

In the first year

Confirm who your advisor is and organize your own committee members before Dec. 31.

- ※ The Counseling committee consists of your advisor and at least three other individuals. Two committee members should be nominated by your advisor.



In the second year

Prepare Research Proposal and Submit it together with grade transcripts and the application for the Qualification Examination. (Please hold your proposal meeting before December)

- ※ The Thesis Counseling Committee should evaluate the proposal, and members of the committee should nominate a Convener~this cannot be the Adviser.
- ※ The subject of qualify exam will be decided by committee during your proposal meeting.
- ※ The qualifying exam including the written examination and oral examination should be completed no later than fifth year. Each student must pass a two-part qualifying exam.
- ※ The oral examination means non-thesis proposal. Please check with the advisor to confirm your proposal topics are sufficiently different.



In the third year and fourth year

(1) Please attend the joining progress report in around Feb.

(2) Completed qualifying exam before the end of fifth year.

- ※ After your third year, you'd better attend the joining progress report every year. If you don't follow, be sure to hold your own progress report by yourself.



In the fifth year until seventh year

Prepare your manuscript done and finish your Ph.D. thesis writing. After you apply and pass defense meeting, you should get your PhD degree

- ※ Assessment Form for Doctoral thesis: For those who satisfy the requirements, the Thesis Counseling committee will approve the thesis and complete an evaluation, to be submitted to the Institute's office to apply for the Ph.D. Degree Examination.
- ※ Appointment of members to the Ph.D. Degree Examination Committee: The Thesis Adviser and members of the Thesis Counseling Committee should jointly decide on external examiners, to be submitted to the University to apply for the Ph.D. Degree Examination following approval by the Consulting Committee.

Course Requirements

Aside from the graduation thesis (12 credits), seminar (4 credits), teaching practice (4 semesters – 0 credits), and compulsory courses (2 credits), students in the Ph.D. program are required to complete 16 further credits in elective courses (students directly admitted from the Master's program must complete 28 credits, not including the Master's program seminar). Ph.D. students in the third year or above must select a 0-credit seminar each semester until graduation.

Seminar Course Notes:

1. The Institute of Basic Medical Sciences Seminar is divided into two classes, taking place on Tuesday and Friday afternoons (time periods: (A) 15:10-16:00; (B) 16:00-16:50; (C) 17:10-18:00). Students can choose which time periods to attend depending on their own interests and schedule, but **must attend at least 16 seminars each semester**.

※ Students must confirm their attendance by signing in; signing in will not be permitted later than 5 minutes after the start of the seminar. Students who are found to have left early after signing in will have **5 points deducted from their overall semester grade**. Students who are found to have signed in on behalf of others will be dealt with according to university regulations.

2. After first- and second-year students have elected their theme article topic (Immunology & Infectious diseases/Cancer/Neuroscience/Other), they should submit an electronic copy of their report to the compilation division of the Institute office. After approval, students should submit two hard copies.

※ If there are color images in the theme article, please print in color. Submission dates: before August 20 for the first semester; before January 20 for the second semester.

3. Grading standards:

- (1) First and second year: individual report grade \pm attendance.
- (2) Third year and above: 80 \pm attendance.

Calculating attendance:

- ① Attendance of a total of 16 classes for first- and second-year students as standard, add 0.5 points for each additional class attended, deduct 1 point for each class absence.
- ② Attendance of a total of 16 classes for third-year students as standard, add 0.5 points for each additional class attended, deduct 1 point for each class absence where between 1-5 classes are missed; deduct 2 points for each class absence where between 6-10 classes are missed; deduct 3 points for each class absence where more than 11 classes are missed.
- ③ Students who fail to attend the entire semester, and third- and fourth-year students who do not participate in the Joint Progress Report or submit a Progress Report before the end of the semester shall be awarded 0 points for the semester.

※ Students who perform poorly in the oral presentation should repeat the presentation on the request of the faculty member serving as moderator or discussant.

4. Students must attend at least 8 joint lectures or the Institute of Basic Medical Sciences special lectures each semester. Ph.D. program students must attend the PR for each section in full, with a deduction of 1 point for each class missed.

5. Other matters:

- (1) Second-semester reports by second-year students shall be conducted entirely in English.
- (2) When selecting a theme article, please check if any students have used the same topic (the Institute of Basic Medical Sciences contains information on the theme articles of each year), and prioritize higher impact journals for publication of the theme article.
- (3) During class, please switch off your mobile phones. Eating is not allowed. Report lasts 30 minutes, discussion lasts 20 minutes.
- (4) A week before the report, an abstract must be submitted to the Institute office for publication by the Institute. On the day of the report, 30 copies must be left in the classroom for reference by those in attendance.
- (5) Tea time: Tuesday/Friday 16:50-17:10.

Recognized enforcement rules for advisors of Ph.D. students

Amended on June 11, 2004
Passed in the program executive meeting on Sept 30, 2014

1. For Ph.D. students, when choosing your advisors, you should consider their expertise and experience, the learning environment, and your research goals. Students must have thorough discussions with the professors in each laboratory, and submit the Notice of Confirmation for Ph.D. thesis advisor to the Institute's office no later than the end of December in the current year.
2. Ph.D. students must apply for rotation in different laboratories as a basis for choosing advisors. When the rotation is completed, students can then choose their advisors.
3. In principle, please choose a full-time professor in our department as your confirmed advisor. If required, you can obtain approval from your advisor and consulting committee, and invite a qualified person to be your co-advisor.
4. Only professors with supervision skills can advise Ph.D. students. Supervision skills broadly refer to the level of academic research, enthusiasm toward education, dedication to ethics and integrity, etc. in a holistic perspective. There are no regulated standards, but in terms of the level of academic research, the minimum requirements are:
 1. Specific research results in the past three years (e.g. published three papers in international journals such as SCI 2000), or accumulated outstanding research results (e.g. published 15 papers in international journals such as SCI 2000).
 2. Should have research projects that are already being conducted, and have existing research funding (e.g. projects from the Ministry of Science and Technology) to support the cost required for students to conduct Ph.D. research.
 3. Advisors for Ph.D. students should be experienced in advising Ph.D. students to complete their thesis, or have received the First Class General Award from the Ministry of Science and Technology more than 3 times.
5. Confirmation of the advisor is approved and countersigned by the consulting committee convened by the Dean.
6. In principle, each professor can supervise up to three Ph.D. students, and conditions for supervising four or more students is limited to masters by research students who are pursuing a Ph.D. degree and have passed all the required work.

Methods for Ph.D. students applying for a change of advisor

Passed in the program executive meeting on April 22, 2013

1. The Institute of Basic Medical Sciences of NCKU (hereinafter referred to as “the Institute”) ensures to protect the freedom of the research student in their studies and research, and to maintain a good relationship between the advisor and the student. This approach has been developed based on Article V of the methods for applying for a change of advisor.
2. Students applying for advisors should follow the regulations for enforcement rules in regard to the confirmation of advisors for Ph.D. students in the Institute. In principle, full-time professors in the Institute shall be appointed, and their qualifications and appointments shall be in accordance with the Institute where the Dean will convene the consulting committee to pass and countersign.
3. During the course of the study, if it is necessary, Ph.D. students can change their advisors once the original advisor, new advisor, and consulting committee approve the request. However, for students in one of the following conditions, it is required for the Dean to convene relevant meetings to resolve the situation, and shall be handled by the appropriate professor, or the Dean will act as the advisor, or adopt other suitable methods:
 1. The original advisor refuses to agree.
 2. The student cannot find a new advisor.
 3. Other circumstances which can significantly impact the relationship between the advisor and the student.
4. Following this method, Ph.D. students can apply for a change of advisor. When the research results are achieved based on the original ideas or concepts of the original advisor, or based on the guidance of the advisor, then approval shall be obtained from both the original advisor and the new advisor for the thesis to be a Ph.D. thesis.
5. The students fast-tracked to pursue a Ph.D. degree shall follow “Implementation methods for students fast-tracked to pursue a Ph.D. degree,” and shall not apply for a change of advisor within one year of joining the Institute.
6. This policy has been passed by the program executive meeting. The same applies to any amendments thereto.

Implementation policy for Research Proposal and Progress Report for Ph.D. students

Amended by the thesis counseling committee on March 25, 2005
Passed in the program executive meeting on June 29, 2005

1. After PhD students confirm their advisors in the first term, before the start of the second year, they shall submit their research proposal to the thesis counseling committee. The format is as per Attachment 1.
2. From the second academic year, Ph.D. students need to have one to two progress reports each year. The format for the written documents is as per Attachment 2. Ph.D. students in the fourth year and above will be advised by the Institute to complete their progress report as soon as possible if they have not completed any progress report for more than 6 months.
3. The first research proposal report and the first progress report for the research proposal shall follow the dates specified by each of the program, and students shall submit them around the same time. Submit the research proposal report before the start of the first semester of the second year, and submit the first progress report before the start of the second semester.
4. The progress report for the research proposal shall be conducted publicly. If the Ph.D. students are part of a research group, and the thesis counseling committee members are part of the research group, then the public report by the student can be regarded as the progress report if the thesis counseling committee approves. Senior students shall practice and use English for their reports.
5. For Ph.D. students who cannot finish the research proposal report and progress report on time, the Dean will convene the consulting committee, advisor, and the convener of the thesis counseling committee to discuss a solution.
6. This method has been implemented after discussion, and passed in the program executive meeting. The same applies for amendments thereof.

Attachment 1

Application for Research Proposal for Ph.D. students

I. General Information

Application Number: _____

Type of Project	<input type="checkbox"/> A (Fees required for executing the proposal)			
Mode of Research	<input type="checkbox"/> Ph.D. thesis proposal		<input type="checkbox"/> Non-thesis proposal	
Department for Proposed Area of Research	<input type="checkbox"/> Dept. of Natural Sciences and Sustainable Development <input type="checkbox"/> Dept. of Life Sciences <input type="checkbox"/> Dept. of International Cooperation and Science Education <input type="checkbox"/> Dept. of Engineering and Technologies <input type="checkbox"/> Dept. of Humanities and Social Sciences			
Institution/Department				
Principal Investigator (PI)		Position		Identification Number
Research	Chinese			
Project Title	English			
Integrated Research Project Title				
Chief Investigator of Integrated Research Project		Identification Number		
Project Period	From _____ to _____ (MM/DD/YY)			
Project Discipline	Discipline Code		Discipline	
Type of Research	<input type="checkbox"/> Pure basic research <input type="checkbox"/> Oriented basic research <input type="checkbox"/> Applied research <input type="checkbox"/> Experimental development			
*Please evaluate your current workload and availability before applying for a new MOST project. Number of grant proposals submitted this year (including pre-approved projects and excluding proposals submitted by co-PIs): _____ Of all grant proposals submitted this year (as indicated above), indicate priority ranking for this proposal (do not repeat ranking): _____ Is this an international joint research? <input type="checkbox"/> No <input type="checkbox"/> Yes, cooperating countries: _____ (Please complete Forms <u>IM01,IM02</u>) Does this project require the use of ocean research vessels? <input type="checkbox"/> No <input type="checkbox"/> Yes (Please complete Form <u>CM15</u>) 1.Does this research project include the following? (Check as applicable and attach relevant consent forms.) <input type="checkbox"/> Human Studies/ Human Specimen <input type="checkbox"/> Human Embryo/ Human Embryonic Stem Cell <input type="checkbox"/> Gene Recombination <input type="checkbox"/> GMO Field Trial <input type="checkbox"/> Microbes in Risk Group 2,3,4 <input type="checkbox"/> Animal Studies(Must also attach a description of the 3R ethical principles of animal experiments) 2.This project is a behavioral science research for Dpt. of Humanities & Social Sciences <input type="checkbox"/> Yes (Please attach the certification of sending the project for research ethics review) <input type="checkbox"/> No				
Contact Information	Name: _____ Telephone: (Office) _____ (Home/Mobile) _____			
Mailing Address				
Fax Number		E-mail		

Form CM01

Page ____ of ____ pages

Signature of Principal Investigator (applicant): _____ Date: _____

Attachment 2

Specification for written content for Ph.D. thesis research progress report

July 15, 1999

Amended on August 21, 2006

1. Cover: include title, student name, advisor, thesis counseling committee, and date of the report (one page)
 2. Chinese abstract (one page)
 3. English abstract (one page)
 4. Content of the progress report (include the following items, and the content for item 1 to item 4 shall be at least 5 pages)
 1. Background information and a summary of results from the last report. If it is different to the originally proposed PhD thesis research topic, please provide an explanation.
 2. Specific objectives of this research report, and the relevance to the PhD thesis research topic.
 3. Materials and methods.
 4. Results and discussion.
 5. Research challenges encountered and solutions.
 6. Direction of future work.
 7. References (up to 50).
 5. If there are papers that have already been accepted or published, please attach them for reference purposes.
- * The progress report shall be submitted to the committee members one week before the publication date, and a soft copy and a hard copy shall be submitted to the Institute office for storage purposes.

Guidelines for Ph.D. students writing Research Proposal and Progress Report

Developed on August 21, 2006
Amended on September 26, 2013

1. According to the implementation method for research proposal and research evaluation report for Ph.D. students at the Institute of Basic Medical Sciences, after Ph.D. students confirm their advisors in the first term, before the start of the second year, they shall submit their research proposal to the thesis counseling committee. Starting from the second academic year, Ph.D. student shall have one to two progress reports every year.
2. The format of the Ph.D. thesis research proposal shall adopt the modification format of the featured research proposal by the Ministry of Science and Technology. (please refer to the webpage of the Institute, as per Attachment 1). When writing this, Ph.D. students shall thoroughly communicate with the advisor, and focus on the 3th item on the research proposal content. All the other items that are not applicable can be simplified or left blank. The proposal shall specifically focus on the feasibility and execution. In terms of the research progress report, students shall follow the sample written content as per the PhD thesis research progress report at the Institute of Basic Medical Sciences (Attachment 2). Attention shall be paid to the continuity of the original PhD thesis research topic, and if it is different from the original proposed research topic, please provide an explanation.
3. For the qualification examination, if it is decided that a non-thesis proposal should be written as the examination subject, then this guideline also needs to be followed.
4. For qualification examinations adopting a non-thesis proposal, the main objective is to allow research students to learn how to write a good research proposal, and to acquire the skills to perform independent research in the future.
5. The selection of a non-thesis proposal is to widen the perspective of Ph.D. students, and shall not be a topic of the original Ph.D. thesis or its extension.
6. Non-thesis proposals shall comply with the standard requirements for a feature research proposal, including significance, originality, logic, and feasibility.
7. Non-thesis proposals and Ph.D. thesis research proposals shall adopt the modified format for feature research proposals of the Ministry of Science and Technology, as per Attachment 1.
8. Non-thesis proposal qualification examinations include written documents and oral report. Oral reports shall be conducted publicly. The written documents for the proposal shall be submitted to thesis counseling committee members one week before the oral report, and the soft copies shall be submitted to the office for storage purposes.
9. Examination results for non-thesis proposals can be as follows: fail, restate, conditional approval, or pass. Those who fail shall take a re-examination, which is limited to one time only.
10. During the writing of the non-thesis proposal, Ph.D. students shall actively consult experts including their advisors. In the process, they can acquire skills for performing independent research, logical reasoning, and problem solving.
11. The research proposal, progress report, and non-thesis proposal shall all be written in English.

Check List for Research Proposal

Version 2 2013/05/08

- ☐ The proposal does not exceed 25 pages (Including preliminary results)

Title

- ☐ The title is accurate and concise.

Abstract

- ☐ English abstract does not exceed 1 page.
- ☐ Abstracts are structured in presenting the **Purpose (The question addressed), Specific Aims, Experimental Design, Anticipated Results, and Significance** of the proposal.
- ☐ English abstract matches Chinese abstract.

Specific Aims

- ☐ Describe the goals that can be achieved within 3-year study.
- ☐ Limit to one page.
- ☐ Describe concisely and realistically what the specific research is intended to accomplish and any hypotheses to be tested.
- ☐ The project employs novel concepts, approaches or methods.
- ☐ The novel concept (hypothesis) is supported by **more than one** rationale.
- ☐ The novel methods and approaches have **advantages** over the existing methods.
- ☐ The aims are original and innovative, **not confirmative**.

Introduction (background → question → hypothesis and rationale → significance)

- ☐ Do not exceed 8 pages.
- ☐ Briefly sketch the background of the present proposal and **evaluate** the existing knowledge. Introduction is not a comprehensive review.
- ☐ Specifically identify **the knowledge gaps which the project is intended to fill**, and point out the questions to be answered.
- ☐ Clearly indicate your **hypothesis** and **rationale** in the end of Introduction.

Significance

- ☐ This study addresses an important problem in biomedical research.
- ☐ Describe **how scientific knowledge will be advanced** if the aims of the proposal are achieved.
- ☐ Describe how these studies will **affect the concepts or methods that drive this field**.
- ☐ Describe the **potential clinical application** of the finding from the proposal.
- ☐ 1 page is recommended.

Preliminary results (for thesis proposal or NSC proposal only)

- ☐ Describe the results **supporting the hypothesis** of the proposal
- ☐ Describe the results supporting feasibility and importance of the proposal.
- ☐ Describe the results **establishing the experience and competence of the investigators**.
- ☐ Preliminary results have been repeated.
- ☐ Preliminary results are well-presented as in a ready-submitted manuscript.

Research Design and Methods

- ☐ Describe the research design and the procedures to be used to accomplish the specific aims of the project.
- ☐ Include the means by which **the data will be collected, analyzed, and interpreted**.
- ☐ Describe the statistical method used in analysis of the data.
- ☐ Present the logic strategy of the research plan, including **the rationale to select methodology, cell lines, animal models** etc.
- ☐ Include **positive and negative control**.
- ☐ Discuss **the sensitivity and specificity of experimental methods**, including alternative complementary experimental approach.
- ☐ Research methods are not just a compilation of protocols.
- ☐ **Overall research designs match specific Aims**.
- ☐ The conceptual framework, design, methods, and analyses adequately developed, well-integrated, and appropriate to the aims of the project.
- ☐ Past tense was NOT used in Research Methods
- ☐ **A research flow chart is recommended** at the end of this section. You may indicate how the research design solve the questions addressed in the Aims.

Expected Results and potential difficulties

- ☐ Estimate the extent to which anticipated results would satisfy the original hypothesis
- ☐ Describe how those results would be important for planning the next steps in the research plan.
- ☐ Discuss the **potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims**.
- ☐ 1-2 pages are recommended

References

- ☐ Include a complete citation for each reference in the text. Each literature citation must include the names of all authors, title, source (book or journal), volume number, page numbers and year of publication. Note: "et al." should only be used after ten authors. Please use the following style for references: Article in a periodical: Sondheimer, N., and Lindquist, S. (2000). Rnq1: an epigenetic modifier of protein function in yeast. Mol. Cell 5, 163–172.
- ☐ Make every attempt to be judicious in compiling a selected, **relevant**, and **current** list of literature citations.

Implementation methods for qualification exam for Ph.D. degree candidates

Passed and amended in the program executive meeting on March 29, 2000
Amended by the consulting committee on April 15, 2000
Passed in the program executive meeting on October 25, 2000

1. Act according to the Office of Academic Affairs Jiao Zhu Ji Zi No. 019 dated on December 27, 1988 (79). In addition to referencing "Important points for the implementation of qualification exams for NCKU Ph.D. degree candidates," this method was developed.
2. The Dean of the program is the head convener for the qualification examination of Ph.D. candidates. The Dean must invite other professors to prepare and organize the qualification examination committee, and chair matters relating to qualification examination.
3. The written qualification examination is held once in an year, and should be arranged before the end of the term. In addition, if required, the examination will be held during the term.
4. In principle, the qualification exam should be completed within 2 years after enrollment, which should not exceed 5 years. The number of attempts for qualification examinations is limited to two. Those who fail to complete within the specified time, according to the important points on the implementation of the school, the program will notify the Registrar Division and these students will be dismissed from the school.
5. The qualification examination should have two subjects. One being the written examination, and the other one being the non-Ph.D. thesis research project oral examination. The subject for written examination is decided by the thesis counseling committee, and students are advised beforehand.
6. As a standard, the score for the qualification examination should be a passing grade. After completing the examination for each subject, in the meeting held by the thesis counseling committee, PhD candidates will be nominated to the Registrar Division of the school.
7. This method has been passed in the program executive meeting, and submitted to the Office of Academic Affairs for verification before the implementation. The same applies to any amendments thereto.

Notes of Guidance for Ph.D. students applying for qualification examinations

Developed on December 2, 2004

Amended by the consulting committee on April 15, 2010

1. According to Article VI of the Organizational Regulations for the Institute of Basic Medical Sciences, "For Ph.D. students in the Institute, within two years, the Dean should convene Ph.D. degree candidate qualification examination committee members to hold a qualification examination. After a Ph.D. student has completed the examination and passed it, the thesis counseling committee will recommend the Ph.D. degree candidate to our Institute. The implementation method for the Ph.D. degree candidate qualification examination shall be developed separately." This Institute has developed an implementation method for PhD degree candidate qualification examination. The Dean acts as the head convener for the Ph.D. degree candidate qualification examination. The Dean must separately employ professors to prepare and form the qualification examination committee, and host the qualification examination as well as other related matters.
2. The qualification examination shall be completed within two years after enrollment, and should not exceed 5 years. The number of attempts for qualification examination shall not exceed two. For students who fail to complete within the specified maximum number of years of study, according to the important point of implementation in our school, the Institute will notify the Registrar Division and have the student dismissed from the school.
3. The qualification examination should contain two subjects decided by the thesis counseling committee, and students will be notified beforehand. Qualification examinations are conducted in both written form and oral form (writing of a research proposal that is not related to the Ph.D. thesis research topic) at the same time. As a standard, students shall pass both the written examination and the oral examination.
4. Once the subjects for the qualification examination have been decided by the thesis counseling committee, they shall not be changed unless under special circumstances and approved by the counseling committee and consulting committee of the Institution.
5. For qualification examinations, the content of the examination and standard shall be based on the characteristics of the course studied, and then specified (as shown in the attachment) and published, so that the research students can follow.
6. Qualification examinations shall be managed by professors employed by the Dean, and in order to maintain the fairness of the exam, the professor in charge and the professors who are responsible for the topics will not be announced. For professors who have a conflict of interest, please apply for withdrawal.
7. When students compose their research proposal (unrelated to the Ph.D. thesis research topic) for the oral examination, written research projects and oral reports shall be included, and reviewed and verified by the thesis counseling committee. The assessment results can be: fail, Restated, conditional pass, or pass.
8. If students have any questions about the qualification examination results, they can apply for a review, but it is only limited to checking whether the score recorded is correct or not.

Example

Immunology

Reference: Immunobiology 6th edition, Janeway, Travers, Walport, Shlomchik eds. Published by Garland Science Publishing, New York, USA.

Scope: Chapter 1 – Chapter 15.

Other points worth noting:

1. Cannot take any reference materials to the exam.
2. The examination time is 3 hours.
3. When answering questions, the students shall only answer the number of questions specified. If more questions were answered, then the total score will be added together to obtain the average value, and then multiplied by the number of questions answered in order to obtain the final score.
4. The total score is 100. A score above 70 is a pass. However for research students whose PhD thesis research topic is not related immunology, the standard is lowered accordingly, and a score of 60 is considered a pass. If the examination results are between 60 and 70, then it will be recorded as a pass.

Implementation method for Ph.D. degree examination

Amended on November 25, 2004

Passed in the program executive meeting on September 21, 1999

1. In addition to complying with detailed rules and common guidelines for research degree examinations at NCKU dated July 19, 1997, this method was developed.
2. Based on the Article of Organizational Regulations of the PhD program, the students must have their own individual thesis counseling committee. The members of the committee are the ex-officio members of the degree examination committee. The degree examination committee is then formed in accordance with relevant regulations.
3. For the students in the Ph.D. program, after they have finished the required course and thesis specified by the Ministry of Education, they must pass all GEPT intermediate/advanced examinations, or equivalent examinations. Their dissertation should meet any one of the requirements below. Within the specified year of study, once the thesis counseling committee approves, the recommendation for the application of degree examination can be made.
 - (1) Already published one paper as the first author in an international journal with an impact factor greater than 5, or published as a co-author who made an equal contribution in an international journal with an impact factor greater or equal to 12.
 - (2) Already published two papers as the first author in international journals (SCI within 2000).
 - (3) The proposed Ph.D. thesis are reviewed and passed: The review of the Ph.D. thesis should be conducted by the convener of the student's thesis counseling committee to convene a thesis counseling committee meeting to review the thesis. The content of the thesis should reach the level of standards equivalent to publishing two journal papers in international journals. The evaluations and recommendations should be written. The convener should convene the evaluation and recommendation review meeting and pass the thesis. After the consulting committee members have invited 3 to 4 review committee members, approval from 2 of 3 (inclusive) or more members should be obtained. The date of the application should no later than 2 months before the end of the term.
4. Once the consulting committee is confirmed, prepare and organize the Ph.D. degree examination committee, and begin the degree examination.
5. Ph.D. degree examination committee should have 5 to 9 members, and 1/3 of the member (inclusive) should be external committee members. Once the candidates for the committee members are confirmed from the discussion held by the thesis counseling committee and consulting committee, the list of candidates is signed and verified by the Dean before employment.
6. Writing of the dissertation should be completed one month before the oral examination. The completeness of the dissertation must be passed in the reviews and recommended by the thesis counseling committee before the oral examination.
7. Degree examinations include thesis publication and oral examination. Thesis publication should be held publicly, with the notice posted two weeks beforehand. After the thesis is published, the degree examination committee will have oral examinations.
8. Students who fail their thesis examination, but their extended study period has not exceed the maximum number of years of study, can have a re-examination during the subsequent year or term. This is limited to one re-examination only.
9. This method has been implemented after being passed in the program executive meeting. The same applies to any amendments thereto.

Common guidelines for students applying for Ph.D. degree examination

Developed on October 29, 2004

Amended on March 11, 2008

1. According to the detailed rules and common guidelines for research degree examinations at NCKU, and the implementation method for the Institute of Basic Medical Sciences PhD degree examination, this common guidelines document was developed in addition. After the student has submitted their final progress report, and their research results comply with the third article of the graduation policy for the implementation method of PhD degree examination in our school, if the advisor approves, then the relevant documents can be submitted to the thesis counseling committee, and the recommendation form for oral examination for degree thesis at our school can be submitted. Upon approval of the thesis counseling committee, the draft version of the thesis can be distributed to each committee member for review.
2. After the thesis counseling committee members have reviewed the draft copy of the thesis, and agree that the content and the quality has met the requirement for a PhD thesis, then the evaluation and recommendation form for PhD thesis in our program shall be completed, and the student is approved and recommended to take an oral examination. The student then applies for PhD degree examination in our program.
3. After the Dean and the consulting committee have reviewed the previous research progress, qualification exams, and other related documents of the student, and have verified and confirmed that the student meets the qualification and other related requirements, the student can then submit an application for degree examination to the school.
4. According to the procedure and methods for employing committee members for degree examinations of research students in this program, the PhD degree examination committee should have 5 to 9 members, where 1/3 (inclusive) of the members should be external members. In addition to the ex-officio members, the Dean convenes the convener of thesis counseling committee, advisor, and consulting committee members to discuss and recommend a qualified person to be part of the degree examination committee, and is then signed and verified by the principle before employment.
5. It is estimated that a minimum of 3-4 weeks processing time is required to verify the application to the school for the PhD degree examination. The thesis oral examination should be held publicly, and the public notice should be announced two weeks beforehand.
6. External examination committee members should be employed by the Dean. The PhD thesis should be supplied to committee members three weeks beforehand for review. The time for oral examination for degree thesis shall be coordinated by the advisor. In the case where foreign professors are appointed as examination committee members, the thesis should have an English version for review, and the oral examination should be conducted in English.
7. Degree examinations include thesis publication and oral examination. The publication of the thesis should be conducted in an open manner. After the students have finished the report, the degree examination committee members shall conduct non-public oral examinations. The score of the degree examination shall be given without recording the names. It is required to be passed by more than 2/3 (inclusive) of the attending committee members, and the average score shall be above 70, in order for a student to be considered to have passed.
8. This method has been implemented after being passed in the program executive meeting. The same applies to any amendments thereto.

Procedure and method for employing committee members for degree examination of Ph.D. students

Passed in the program executive meeting on February 25, 2000

1. This method is based on the degree examination rules for research students in our school, and Articles of Organizational Regulations of the institute, and the implementation method for Ph.D. degree examination in our institute.
2. The Ph.D. program should form a thesis counseling committee for each Ph.D. student before the end of the first academic year. The committee should consist of 3 to 5 members, formed by selecting related scholars after the Director requests recommendations from the student's advisor and members of the consulting committee. One of the members is to be appointed as the convener (cannot be the advisor). The committee should meet 1~2 times per year to evaluate the course content, subjects for qualification exams, and research project progress of the research student. The members of the committee should be ex-officio members of the degree examination committee for the student.
3. The Ph.D. degree examination committee should have 5 to 9 members, where 1/3 (inclusive) of the members should be external members. In addition to the ex-officio members, the Director convenes the convener of the thesis counseling committee, advisor, and consulting committee members to discuss and recommend a qualified person with one of the following qualifications to be part of the degree examination committee, and is then signed and verified by the principle before employment:
 1. A former professor.
 2. A current academic of the Academia Sinica, or a former research fellow of the Academia Sinica.
 3. A former associate professor or assistant professor, or currently an associate research fellow or assistant research fellow at the Academia Sinica, who has attained outstanding achievements in academia.
 4. Obtained a Ph.D. degree and has attained outstanding achievements in academia.
 5. Specializes in a rare or special discipline, and has attained outstanding achievements in academia or in the profession.
4. Degree examination committee members should attend the committee meeting in person and cannot delegate to someone else. The graduation thesis reviewing committee should have at least 5 committee members attending the meeting, and only when the external committee members account for 1/3 of the total number of committee members, then the meeting can be held.
5. This method has been passed in the program executive meeting, and submitted to the Office of Academic Affairs for verification before implementation. The same applies to any amendments thereto.

Appendices

- I . Notice of confirmation for PhD thesis advisor
- II . Notice of change for PhD thesis advisor
- III . Thesis Proposal Evaluation Form for PhD student
- IV . Progress Report Evaluation Form for PhD student
- V . Application form for PhD candidate qualifying examination
- VI . Qualification Examination-Oral examination
- VII . Form for the Addition of Members to the Thesis Counseling committee
- VIII . Form for the Removal of Members from the Thesis Counseling committee
- IX . Recommendation Form for viva of Doctoral thesis
- X . Dissertation Oral Defense Committee Recommendation Form
- XI . Assessment Form for Doctoral thesis

Notice of confirmation for Ph.D. thesis advisor

From the _____ Fall/Spring semester, the academic work and thesis of _____ (Student Name) in the PhD program at the Institute of Basic Medical Sciences will be supervised under prof. _____ (advisor name) of _____ (department) .

Thesis advisor (signature):

Date: _____

Chair of the consulting committee (signature):

Date: _____

Recommendation form for the thesis counseling committee

Student Name:

Advisor:

Preliminary research topic:

	Name	Reasons for recommending
Recommending committee member (1)		
Recommending committee member (2)		

Note: It is suggested to recommend a clinical professor to act a thesis counseling committee member.

Notice of change for Ph.D. thesis advisor

From the _____ Fall/Spring semester, the academic work and thesis of _____ (Student Name) _____
in the PhD program at the Institute of Basic Medical Sciences will be supervised
under prof. _____ (advisor name) of _____ (department) .

Thesis advisor (signature): _____ Date: _____

Original thesis advisor (signature): _____ Date: _____

Chair of the consulting committee (signature): _____ Date: _____

Recommendation form for the thesis counseling committee

Student Name:

Advisor:

Preliminary research topic:

	Name	Reasons for recommending
Recommending committee member (1)		
Recommending committee member (2)		

Note: It is suggested to recommend a clinical professor to act a thesis counseling committee member.

Research Proposal Evaluation Form for Ph.D. Student

Student Name:

Student ID:

Advisor:

Program: ☐ Cancer biology ☐ Infectious Disease ☐ Neuroscience ☐ Translational
Medicine

Topic:

Date:

Performance on project implementation: (Experimental techniques, execution, future development, etc.)

Convener Signature:

Date:

* This report form was completed by the convener of the thesis counseling committee. Please return this form to the office for processing before Y M D.

(The assessment subjects are the students. Please do not give this form to the students to fill in)

Progress Report Evaluation Form for Ph.D. Student

Student Name:

Student ID:

Year: PhD ____

Advisor:

Report topic:

Date:

Place:

Time:

Contents of Progress Assessment: Please briefly describe results from the progress, including whether conducted according to the original plan, and the future development of this study.

Recommendations to the student:

.

Office:

Convener Signature:

Date:

This report form was completed by the convener of the thesis counseling committee. Please return this form to the office for processing before Y M D.

(The assessment subjects are the students. Please do not give this form to the student to fill in.)

Application form for Ph.D. candidate qualifying examination

Date: _____

Applicant's name: _____ Student ID: _____ Year: ____

Examination Subject: (Please specify the expected completion time)

Note: 1. Please choose the examination subject from the following list

**Cell Biology, Molecular Biology, Tumor Biology, Neuroscience,
Immunology**

2. Submit all transcripts of the PhD research student (PhD students who are directly pursuing a PhD research program should submit the transcript from the first year of their masters program)

Advisor: (Signature) _____ Date: _____

Convener and Committee members: _____ Date: _____
(Signature)

_____ Date: _____

_____ Date: _____

_____ Date: _____

Qualification Examination –Oral examination

Subject: Examination for non-Ph.D. thesis research program

Student ID:

Student ID:

Topic:

Outcome: ☐ Pass ☐ Conditional pass ☐ Restated ☐ Fail

Comments:

Convener and committee member:
(signature)

Date: _____

- ※ If the “Fail” grade is given, Please indicate whether the Student should rewrite the proposal and/or re-defend it orally. Set a date for the rewrite or defense.
- ※ According to the “Implementation methods for qualification exam for Ph.D degree candidates”, the number of attempts for qualification examinations is limited to two. Those who fail to complete within the specified time, according to the important points on the implementation of the school, the program will notify the Registrar Division and thesis students will be dismissed from the school.

Form for the Addition of Members to the Thesis Counseling Committee

Student Name	
Thesis Adviser	
Members of the Thesis Counseling Committee	
Proposed Additions to the Thesis Counseling Committee and Reasons	

Signed by Thesis Adviser _____

Date: _____

Chair of the consulting committee: _____ Date: _____

Form for the Removal of Members from the Thesis
Counseling Committee

Applicant	
Student Name	
Thesis Adviser	
Members to be Removed from the Thesis Counseling Committee and Reasons	

Signed by Applicant: _____ Date: _____

Chair of the consulting committee: _____ Date: _____

Recommendation Form for viva of Doctoral thesis

Student Name:

Student ID:

Year: PhD

Advisor:

Title:

Papers published in international journals (including authors, title, and details of the journals, and photocopy of the journal article)

Reasons for recommendation (including the student's performance in the institute, and the main contributions in research papers, etc. Please use additional A4 sized paper if extra space is required)

- ☐ Students at or above sixth year PhD who have had their thesis already published, but the impact of the journal has not met the standard required by the program, as per the executive meeting of the 2014 academic year, once approved by thesis counseling committee to apply for degree examination, students can apply to leave the institute once passed.

Thesis counseling committee Convener and committee member:
(Signature)

Date: Y M D

Dissertation Oral Defense Committee Recommendation Form

First Committee Member:

Highest level of education:

(Institution and degree)

Servicing department:

Title:

Expertise:

Second Committee Member:

Highest level of education:

(Institution and degree)

Servicing department:

Title:

Expertise:

Third Committee Member:

Highest level of education:

(Institution and degree)

Servicing department:

Title:

Expertise:

Thesis counseling committee Convener and committee member:

(signature)

Y M D

(Letter of appointment to external committee members should be issued by the institute in order to show respect. For better time efficiency, advisors can contact and inform the external committee members beforehand. Direct contact by the student is not permitted in order avoid miscommunication.)

Assessment Form for Doctoral thesis

Author:

Advisor:

Topic:

- 1. I have thoroughly read the paper. I believe its content and quality are in line with the requirements of a PhD thesis. I recommend the author to participate in the degree examination.**

Committee member signature: _____ Date: _____

- 2. I have thoroughly read this paper. I recommend the author to carefully read my comments and have detailed discussions with the advisor. Once the appropriate modifications have been made to the thesis, the author can apply for degree examination.**

Committee member signature: _____ Date: _____

- 3. I have thoroughly read this paper. I believe it does not meet the requirements of a PhD thesis, and I am unable to recommend the author to participate in the degree examination.**

Committee member signature: _____ Date: _____

Please assess (this paper or another paper) the contribution of this thesis in its area, and explain the strengths and weaknesses. If this paper is acceptable, please provide comments regarding modifications, so that it can be published in scientific journals. If this paper is not acceptable, please clearly indicate the biggest problem.

Please return this form before _____ (DATE) _____, otherwise the oral examination must be postponed.