# Department of Chemistry, National Sun Yat-sen University Regulations for Ph.D. Qualification Examination and Degree Examination

(applicable for new students who enrolled in the 2015 school year or later)

1. These Regulations are set according to the Degree Conferral Law and the Enforcement Rules of Degree Conferral Law established by the Ministry of Education, this university's Academic Policies and the Implementation Bylaws for Ph.D. and Master Degree Examination.

# 2. Study period related items

- (1) Duration of study: duration of study is two to seven years according to the Ministry of Education regulations (not including the period of deferred admission and suspended study).
- (2) Credit system and course requirements
  - 1. A student must select courses approved by his/her advisor and department chairman.
  - 2. Prior to graduation, the Ph.D. students must complete the required courses and receive the minimum credits required for graduation.

#### 3. Courses

- (1) Six credits from research project (mandatory).
- (2) For the first and second years, the one credit literature discussion courses for each semester is mandatory.
- (3) In addition to Items (1) and (2) mentioned above, students must gain at least 12 credits (at least nine credits must be from courses offered by this department).
- (4) Ph.D. students enrolled in MS-Ph.D. all-in-one program cannot take courses that they have previously studied before enrollment.
- (5) For Ph.D. students enrolled in MS-Ph.D. all-in-one program, a minimum 31 credits are required for graduation (at least 15 elective credits must be from courses offered by this department). For these students a maximum of 15 credits from their previous studies can be transferred (per Article 4 of this university's Credit Transfer Regulations).
- (6) Enrolled graduate students shall complete the Academic Research Ethics Education Course before the end of their first year of study pursuant to this university's Guidelines for Implementation of Academic Research Ethics Education. Those who have not passed this course are not eligible for the degree examination.

#### (3) Division transfer limitations

- 1. Students can only transfer after getting approval from their advisors in both divisions.
- 2. After the division transfer, students with incomplete qualification examination shall take the qualification examination of the division they transferred into. They may have a one-year extension for the qualification examination.

#### (4) Advisor selection/assignment

1. Graduate students must choose an advisor before the end of the first semester. Before

- an advisor is selected, the department chairman shall appoint a temporary advisor.
- 2. If a graduate student needs to change an already selected advisor, he/she must obtain written consent from both the original advisor and the new advisor.

## (5) Other

- 1. Each Ph.D. student must ask the advisor to invite two to four professors specializing in related fields from this department or university (when necessary) to act as advisory committee members for course planning and cume examinations before the second semester registration. The advisor shall be an ex-officio committee member.
- 2. If a co-advisor is required from outside the department, the advisor's consent must be obtained and the request shall be submitted to the department chairman for approval and be kept on file.

## 3. Ph.D. candidate qualification examination

- (1) Qualification examination: students must pass the cume examination(s) within three and half years from enrollment (not including the time of suspended study). Students who have not passed the cume examination(s) shall be expelled from the Ph. D. program.
- (2) Cume examinations: students shall take the examinations offered by his division. The passing standards and examination methods for all divisions are listed below. Four written examinations will be given each semester (examination dates will be set separately). Once a written examination has been taken by a student, the following examinations shall not be missed.

#### 1. Physical chemistry division:

- (1) Each student can participate in written examinations 12 times. The examinations are not scored, and the grade will be shown as pass or fail. Passing four examinations is deemed passing the cume examinations.
- (2) Scope of the examinations and whether students are allowed to bring reference books will be announced before each examination. Physical chemistry examinations will cover three parts: A. thermodynamics; B. kinetics; and C. quantum chemistry (including spectroscopy and material structure).

## 2. Organic chemistry division:

- (1) Cumulative scoring is adopted for the examinations. Each student can participate in a maximum of 10 written examinations.
- (2) Scoring method: each examination will be scored as 0, 1, 2, or 3 points. Students who have accumulated 10 points are deemed to have passed the cume examinations.

## 3. Inorganic chemistry division:

- (1) Cumulative scoring is adopted for the examination. Each student can participate in a maximum of 10 written examinations.
- (2) Scoring method: each examination will be scored as 0, 1, 2, or 3 points. Students who have accumulated 10 points are deemed to have passed the cume examinations.

## 4. Analytical chemistry division:

- (1) Each student can participate in written examination 12 times. The examinations are not scored, and the grade will be shown as pass or fail. Passing four examinations is deemed passing the cume examinations.
- (2) Scope of the examinations and whether students are allowed to bring reference books will be announced before each examination.
- (3) <u>Journal papers:</u> if a student has a SCI paper published within three and half years from enrollment (including those that have been accepted yet wait for publication), it can be translated to examination results. To be eligible, a student must be the frist author, and the translational standards are: for organic chemistry division and inorganic chemistry division, each paper can be translated to 3 points if it ranks in the first 30% in that field of study, and 2 points if it ranks in the first 50%. Other SCI journal papers can be translated to 1 point per paper; for analytical chemistry division and physical chemistry division, each published SCI paper can be translated to one pass.

#### 4. Oral examination for research project

- 1. Before the degree examination, a student must propose a research project not related to the graduation thesis and participate in an oral examination. The time requirement is as follows:
  - (1) Organic chemistry division before the thesis presentation.
  - (2) Inorganic chemistry division before the thesis presentation.
  - (3) Physical chemistry division before the thesis presentation.
  - (4) Analytical chemistry division before the thesis presentation.
- 2. The oral examination committee is composed of five people, who will be convened by the advisor. At least three members shall be experts in this division or in related fields.
- 3. Ph.D. candidate must notify each committee member one month before the oral examination and submit the research project to all committee members two weeks before the oral examination date.
- 4. Oral examination grade will be in the form of pass/fail. Students who do not pass may retake the examination one more time only.
- 5. After a student passes the oral examination, he/she shall submit a copy of the research project to the department office for archiving.

# 5. Thesis presentation

Each student shall give a public presentation regarding his/her thesis in the department before he/she applies for taking the degree examination.

# 6. Publication of academic paper

Minimum academic research requirement for Ph.D. graduation: before applying for taking the degree examination, a graduate student must have published a SCI paper, of which the student must be the first author or the co-first author after the advisor (or the co-advisor).

## 7. Standard of English proficiency examination

Before a student can apply for taking the degree examination, he/she must pass the English

proficiency examination standard set by this department (527 points or more on the TOEFL written examination, 173 points or more on the TOEFL CBT, 71 points or more on the TOEFL iBT, GEPT (High-Intermediate Preliminary Test), or 750 points on the TOEIC examination). Or alternatively, students can complete four credits in the "Language course: English Language" during their postgraduate study period.

# 8. Ph.D. degree examination

- 1. Graduate students who have fulfilled the requirements listed in Provisions 2 and 3 above shall be qualified as a Ph.D. candidate.
- 2. Graduate students who have obtained the Ph.D. candidate qualification, completed the initial draft of their Ph.D. thesis, and fulfilled Provisions 4 7 mentioned above can apply for taking the Ph.D. degree examination with the advisor's approval.
- 3. The oral examination committee for Ph.D. degree is composed of five to nine people. The members shall be nominated by the advisor according to Articles 10, 11, and 13 of this university's Implementation Bylaws for Ph. D. and Master Degree Examination. After approval by the department chairman, the chairman shall assign a member as the convener (the advisor shall not be the convener) and ask for the President's approval for appointment.
- 4. Students who fail the degree examination and have not reached the maximum extended period of study cannot retake the examination in the same semester. Only one re-examination is allowed. Students who fail the re-examination shall be asked to withdraw according to the university's Academic Policies.
- 9. Graduation: students who have fulfilled all of the aforementioned provisions can apply for graduation.
- 10. These Regulations shall be adopted by the Departmental Affairs Council and College Affairs Council, and signed and submitted for the President's approval before implementation. The same applies for any amendments and revisions.