

Implementation Guidelines for Doctoral Candidacy Qualification Examinations of the Department of Chemistry, Chung Yuan Christian University

Article 1

These guidelines are established in accordance with Chung Yuan Christian University's "Implementation Guidelines for Doctoral Candidacy Qualification Examinations."

Article 2

Doctoral students may be recognized as doctoral candidates only after passing the qualification examination.

Article 3

The qualification examination is held twice per academic year, once each semester. The department will announce the examination dates and content scope and accept applications two months in advance.

Article 4

Qualification Examination Subjects:

- (1) Chemistry and Materials Group: Organic Chemistry, Inorganic Chemistry, Analytical Chemistry, Physical Chemistry, Biochemistry, Materials Chemistry, Polymer Chemistry
- (2) Biomedical Group: Cellular Biochemistry, Cellular Molecular Biology, Advanced Cytology, Cellular Physiology

Article 5

Examination Methods:

- (1) **Chemistry and Materials Group:**
 1. The examination uses a points-based system, with one exam held each semester. Students may choose to take up to two subjects per exam. Each subject is graded on a scale of 0, 1, or 2 points. Students pass the qualification examination by accumulating a total of at least 7 points, with at least 4 points from core subjects and at least 1 point from non-core subjects.
 2. Point Waivers for Qualification Exam:
 - (1) Publishing a paper in a Q2 or higher journal after entering the doctoral program earns 2 points (student must be the first author, excluding the advisor). Papers in Q3 or lower journals earn 1 point.
 - (2) An invention patent qualifies for a 2-point waiver, and a utility patent for a 1-point waiver. The student must be the primary inventor, excluding the advisor and any companies.
 - (3) Any disputes regarding the above qualifications will be resolved by the Thesis Review Committee.
 - (4) The maximum point waiver allowed is 2 points.
- (2) **Biomedical Group:**
 1. Students must pass two subjects, with a minimum score of 70 in each to qualify.

2. A student who publishes a first-author or corresponding-author paper in a Q2-ranked JCR journal qualifies for a take-home examination for one subject. Two such papers qualify the student for a take-home examination in two subjects. Each take-home exam score must be at least 70 to pass the qualification examination.

Article 6

Examinations are composed by one or two instructors appointed by the department head. The time allowed for each subject examination is determined by the appointed instructors.

Article 7

Doctoral students may begin the qualification examination after one semester in the program or after entering directly into the doctoral track. Students must pass within four years from the start of enrollment (excluding any periods of leave). Failure to do so will result in the department notifying the Registrar's Office to enforce withdrawal.

Article 8

Upon passing the qualification examination, the department will submit the results, and the Registrar's Office will annotate "Qualification Examination Passed, Verified" in the grade records.

Article 9

These guidelines shall be implemented upon approval by the department meeting and amended in the same manner.