

Outline of Cumulative Examination Policy

Administered by

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Cumulative Examinations (“Cumes”)

Cumulative Examinations (“Cumes”) are common in most graduate programs all over the world. It corresponds to the written Comprehensive Examination for Ph.D. candidates in the curriculum training program of the Department of Polymer Sciences and Engineering at Peking University. Passing them is one of the requirements of the Graduate College for admission to candidacy for the Ph.D. degree.

The purpose of cumulative exams is two-fold. First, they can be used as a mechanism for prompting graduate students to stay abreast of the vibrant, cutting-edge chemistry and technology in the modern scientific world, especially areas outside their own field of research. Second, a student's performance on the cumulative exams is one benchmark the faculty uses in deciding if the student is making satisfactory progress and if the student should be advanced to candidacy.

Operation Details

All Ph.D. students take the cumulative examinations. They may skip their first Fall semester cume to concentrate on coursework and choosing group. Ph.D. students must begin taking cumulative exams at the beginning of their second semester in residence. Typically, graduate students take one cumulative exam each month during the second to fourth semesters in the program.

These exams are given once a month throughout the regular academic year for a total of six per year. There are no cumulative exams during the summer. The exam periods are 60 minutes long and all students take the exams at the same time. Tentative schedule will be the **4th Friday, 7 to 8PM in February, March, April, September, October and November** each year.

The cumulative exams emphasize modern topics of interest in the polymer sciences and engineering. They can cover any subject and are not necessarily restricted to a specific research topic. The topics of each examination and any

suggested readings will be announced one week in advance. However, the topics of about a quarter of the questions in each individual exam are allowed to remain unannounced before the exam. The unannounced-topic questions serve to test the breadth of your knowledge of chemistry and the ability to think and to solve unexpected problems.

Each exam is roughly divided into two parts: One part, of one or more questions, covers a general topic in polymer chemistry, polymer physics, organic chemistry or other related areas; the other is one or more questions about recent research found in the current literature. The results and answer keys for each exam will be announced within two weeks after the exam date. Graded exams are not returned, but can be reviewed by the student. Examples of old cume questions will be made available in the department office.

Grading

The exams are graded by faculty member on a **0-1-2-3-4-5** point system, where **5** is the highest score possible. Normally, the grades will be evenly distributed with each grade being no more than 20% and no less than 10%. To satisfy the cume requirement, you must earn a total of **15** points in a maximum of **6** attempts out of **9** possible exams held. Under this formula, it is in principle possible to pass the cumes after the first **3** exams (by the end of your first year in the program) provided you get **5** points on each of the first three attempted exams, but some students may take as long as three semesters (i.e., 6 attempts out of 9 possible exams held) to obtain the required **15** cume points. Students who accumulate **15** points in less than 6 attempts do not have to take any cumes after the last exam that fulfills your **15** cume points.

Accomplishment

Students will be encouraged to take each available cume until a total of **15** points have been accumulated. This will fulfill the "Written Exam" requirement for the second year. Students will then qualify for the "Oral Exam" that is required of all Ph.D. candidates at the end of the second year.

If the student accumulates a total of less than **15** points in **6** attempts in the two year period, the student may petition the Graduate Advisory Committee and, under exceptional mitigating circumstances, may be granted attempts to accumulate the remaining points. Students who still do not accumulate enough points by the end of second year in program will not be allowed to continue in the Ph.D. program.