

Princeton University
Department of Chemistry



Graduate Student Handbook
2011 – 2012 Edition

Handbook for Graduate Students in the Department of Chemistry

2011 - 2012 Edition

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DEPARTMENT PROGRAM REQUIREMENTS & POLICIES

Placement Examinations

It is important that all students satisfy a minimum of preparation across the areas of chemistry. Qualifying exams, given upon entrance in the fall, are used for placement in courses and to give an idea of the student's preparation for graduate level study. The student's performance on the exams will be analyzed to provide advice on course selection and area of study.

If an incoming student fails an exam, satisfactory completion (grade of B- or better) of a 400 or 500 level course will compensate for that failure (see table below). Five exams will be given, in organic chemistry, inorganic chemistry, biochemistry, physical chemistry, chemical physics, and three must be passed or compensated by coursework.

The following table lists courses offered in the 2011-2012 academic year which are approved to compensate for failed placement exams. Students may choose to take more advanced courses to satisfy this requirement with the approval of the Director of Graduate Studies.

Fail organic chemistry exam	CHM 403 CHM 530	Advanced Organic Chemistry Synthetic Organic Chemistry
Fail inorganic chemistry exam	CHM 407 CHM 408	Inorganic Chemistry – Structure & Bonding Inorganic Chemistry –Reactions & Mechanisms
Fail physical chemistry exam	CHM 405 CHM 501	Advanced Phys Chem: Quantum Mechanics Introduction to Quantum Chemistry
Fail chemical physics exam	PHY 501 PHY 505	Electricity & Magnetism Quantum Mechanics I
Fail biochemistry exam	MOL 504 MOL 345/ CHM 345* CHM 538 CHM 515	Cellular Biochemistry Biochemistry* Topics in Biological Chemistry Biophysical Chemistry I

* MOL 345/CHM 345 is not a graduate course, and therefore may not be counted toward the six-course requirement described below.

Course Requirements

Students are required to take and perform satisfactorily (B average) in six graduate courses, no more than two of which may be 400-level. Up to two graduate courses from a prior institution may be counted toward this requirement, provided an equivalent course is offered at Princeton; Professor Haw Yang, the Director of Graduate Studies grants such approval on an individual basis after consulting with appropriate faculty. All requests for course credits should be submitted to Sallie Dunner, Graduate Administrator.

In addition, a student must demonstrate proficiency in a breadth of subject matter by achieving grades of B or better in coursework in each of four distribution areas, out of a total of ten. Distribution areas are listed below:

1. Spectroscopy, quantum mechanics
2. Thermodynamics or chemical dynamics
3. Solid state chemistry
4. Physical inorganic, coordination chemistry
5. Organometallic chemistry
6. Physical organic chemistry
7. Organic synthesis
8. Biophysical chemistry
9. Bioorganic, bioinorganic chemistry
10. Simulation, modeling, theory

A list of 400 or 500-level courses which satisfy each area is provided below. Not all of these courses will be offered in the upcoming academic year. For more information on course offerings, please check the Registrar's website. New students will be provided with a list of courses that will be offered during the Fall 2011 semester.

Consult with your advisor to make sure your course selection satisfies the distribution requirement.

Area	Course No.	Title
1. Spectroscopy & quantum mechanics	CHM 405	Advanced Physical Chemistry: Quantum Mechanics
	CHM 501	Introduction to Quantum Chemistry
	CHM 502	Advanced Quantum Chemistry
	CHM 504	Molecular Spectroscopy: Observation & Manipulation
	CHM 509	Topics in Physical Chemistry: Specific subject varies
	CHM 510	Topics in Physical Chemistry: Specific subject varies
	CHM 539*	Introduction to Chemical Instrumentation
	PHY 501	Electricity & Magnetism
	PHY 505	Quantum Mechanics I
	APC 509**	Methods & Concepts in Electronic Structure Theory
		* CHM 539 may satisfy Area 1 or 6 but not both
		** APC 509 may satisfy Area 1, 3 or 10 but not more than one area

Area	Course No.	Title
2. Thermodynamics and chemical dynamics	CHM 406 CHM 503/CBE 524 CHM 512 CHM 524* ELE 431** MSE 502 MSE 504 GEO 537	Advanced Physical Chemistry Introduction to Statistical Mechanics Chemical Kinetics Topics in Inorganic Chemistry: Specific subject varies Solar Energy Conversion Thermodynamics & Kinetics of Materials Modeling & Simulation in Materials Science Atmospheric Chemistry * CHM 524 may satisfy Area 2 or 4 but not both ** ELE 431 may satisfy Area 2 or 4 but not both
3. Solid state chemistry	CHM 409 CHM 507 CHM 511 CBE 526/CHM 527 CBE 536 GEO 501 MSE 501 MSE 503 MSE 505 APC 509* ELE 541 ELE 545	Structural Solid State Chemistry Solid State Chemistry Chemistry & Physics of Nanomaterials Surface Science: Processes and Probes Glasses & Supercooled Liquids Physics & Chemistry of Minerals & Materials Introduction to Materials Structure of Materials Microscopy Methods in Materials Methods & Concepts in Electronic Structure Theory Modern Quantum Devices Electronic Devices ** APC 509 may satisfy Area 1, 3 or 10 but not more than one area.
4. Physical inorganic, coordination chemistry	CHM 407 CHM 408 CHM 522 CHM 523 CHM 524* CHM 544** GEO 470 GEO 418	Inorganic Chemistry – Structure & Bonding Inorganic Chemistry – Reactions & Mechanisms Advanced Inorganic Chemistry Coordination Chemistry Topics in Inorganic Chemistry: Subject varies Metals in Biology Environmental Chemistry of Soils Environmental Aqueous Geochemistry * CHM 524 may satisfy Area 2 or 4 but not both ** CHM 544 may satisfy Area 4 or 9 but not both

5. Organometallic chemistry	CHM 521	Organometallic Chemistry
6. Physical organic chemistry	CHM 403 CHM 531 CHM 539* CHE 415/CHM 415 CHE 544	Advanced Organic Chemistry Advanced Organic Chemistry Introduction to Chemical Instrumentation* Polymers Solid-State Properties of Polymers * CHM 539 may satisfy Area 1 or 6 but not both
7. Organic synthesis	CHM 530 CHM 534 CHM 536 CHE 541/MSE 534	Synthetic Organic Chemistry Modern Methods in Organic Synthesis Advanced Topics in Organic Synthesis Polymer Synthesis
8. Biophysical chemistry	CHM 515 CHM 516 CHM 542 CHM 543 CHM 550 MOL 515/PHY 570 CHE 533 CHE 538	Biophysical Chemistry I Biophysical Chemistry II Principles of Macromolecular Structure Advanced Topics in Structural Biology Contemporary Problems in Molecular Biophysics Methods and Logic in Quantitative Biology Molecular Recognition & Biomolecular Engineering Biomolecular Engineering
9. Chemical biology, bioinorganic chemistry	CHM 440 CHM 538 CHM 544* MOL 504	Drug Discovery in the Genomics Era Topics in Biological Chemistry: Biological NMR Metals in Biology Cellular Biochemistry *CHM 544 may satisfy Area 4 or 9 but not both
10. Simulation, modeling, theory	CHM 513 MAE 501/APC 501 MAE 502 MSE 515 CHE 448/MAT 448 COS 551/MOL 551 APC 509* APC 524/MAE 506	Electronic Properties of Materials Mathematical Methods of Engineering Analysis I Mathematical Methods of Engineering Analysis II Random Heterogeneous Materials Introduction to Nonlinear Dynamics Introduction to Genomics & Computational Molecular Biology Methods & Concepts in Electronic Structure Theory* Software Engineering for Scientific Computing APC 509 may satisfy Area 1, 3 or 10 but not more than one area.

An appeal for additions to the list of approved courses can be made (via email) to the Director of Graduate Studies.

A student who fails to demonstrate proficiency in course work or distribution areas by the end of the first academic year may choose to either

- (a) take an exam during the first summer (typical final exam in a 400 level or higher course);
- or
- (b) complete a course (B or better) from the list of approved courses in the first semester of the second academic year.

Completion of the distribution requirements is necessary for attaining the Ph.D. degree. Students are expected to meet these requirements by the end of the second year.

Choosing an Advisor

Incoming students will choose their research advisor after they have properly evaluated research opportunities that are available to them, as described in the following paragraph. Therefore, all incoming students will be assigned, by the Director of Graduate Studies, a temporary advisor for the first semester. This advisor will help select fall classes, provide a workspace for the fall semester, and oversee progress in choosing a research group. If a student chooses to participate in the optional summer research program prior to the start of the first year, he or she will sometimes be assigned a different temporary advisor for the fall semester.

First-year students are required to attend twice-weekly faculty research talks offered during the fall semester, whereby they will get to know all of the faculty and their research areas. Students are also encouraged to evaluate research opportunities through informal discussions with faculty and students. Further, students must discuss research opportunities with **three faculty members** over the course of the semester and then choose a research advisor **before December 15.**

With DGS permission, students may choose an advisor from another department, provided their research project relates to chemistry, and that the advisor outside the department agrees to supervise the student.

The Advisory Committee

After the student has chosen a research advisor, a thesis Advisory Committee will be assigned in consultation with the student and his/her research advisor. This committee is designed to follow a student's progress throughout the Ph.D. work and consists of the advisor and two other faculty members. On occasion a student might include a fourth "optional" faculty member to provide scientific insight; however, this optional member is not an official member of the committee. Official members of the committee must hold the rank of assistant

professor or higher, and at least one member (other than the advisor) must be from the Chemistry Department.

- The advisory committee will meet with the student at least once a year according to the following timeline, although the student or a member of the committee may initiate additional meetings as needed.
 - At the end of the first academic year, the advisory committee will review the student's academic record, ensure that he or she has met the distribution requirements (and, if not, discuss a plan to satisfy them), and make sure the student is on course for the General Examination
 - In the second year, the advisory committee (plus one other faculty member) will hear the General Examination. The additional committee member will be outside the student's field of research and assigned by the Director of Graduate Studies.
 - In the third year, the Advisory Committee members will attend the student's third year seminar. There will be a meeting of the student and their Advisory Committee soon after the third year seminar.
 - Prior to the defense of their thesis at the final public oral, the student will generate an original research proposal, not related to thesis research, and defend it before their advisory committee.
 - The Advisory Committee will serve as the FPO (Final Public Oral, oral defense of the thesis) Committee.

Teaching Requirement

The teaching requirement is two semesters at half time or one semester full time (20 hr/wk). Students typically satisfy this requirement during the second academic year. International students must demonstrate proficiency in spoken English before they may teach.

The General Examination

The Chemistry Department offers the General Examination during November* and January, and, in some circumstances, May, of the student's second year. The specific timing of each student's exam will be determined by the DGS in consultation with the student's advisor.

The examination consists of seven parts, and a student must pass all seven. The first three parts of the examination are the course requirements undertaken in the first year, specifically, overall GPA of 3.0 or better in six classes, passing or compensating for three placement exams, and satisfactory coursework with a B or better in four of the ten distribution areas.

Part four is satisfactory research progress as evaluated by the research advisor. Parts five and six consist of a written proposal based on the student's chosen area of thesis research, and the oral defense of that proposal before the Generals Committee.

Part seven of the exam consists of an independent research proposal that is in the student's general area of research but which is not part of the student's thesis research and which will typically be presented at the same time as the thesis research proposal. However, in some instances, with the approval of the student's advisor, it can be carried over to a later date but must be completed by the end of the third year.

The oral portion of the exam will generally proceed as follows: There will be an oral seminar-like presentation to the committee of the proposed thesis research which will be followed by questions to test the candidate's preparation to do the thesis research. The advisor will be present as a non-voting participant but who is permitted to ask questions of the candidate. This part of the exam will typically take approximately one hour. The second section of the oral exam will consist of presentation to the committee, again in a seminar-like manner, of the independent research proposal. Oral examination of this independent proposal will follow. This part of the exam will typically take about 45 minutes.

Immediately following the two oral defenses, the Committee (excluding the advisor) will discuss the performance and assign a grade for parts 5, 6 and 7. The committee and the advisor then meet to assign an overall grade of pass, fail, or pass with distinction, for all seven parts. Students who successfully pass the General Examination may advance to Ph.D. candidacy. However, it is possible that the candidate will pass the regular part of the exam, i.e., parts 1 through 6, but not the independent proposal. In such instances, the regular exam results will be reported to the Graduate School as a pass but the department will require the candidate to retake and pass the independent proposal by the end of the third year, or the student will not be readmitted.

If a student fails the regular part of the general exam, he or she may retake the exam within one year but usually during the next scheduled examination period. In the event of a second failure, the student will be terminated from the Ph.D. program, with the award of a terminal Master of Arts in Chemistry degree.

Information on the requirements for the written proposals and the oral defense are given in the Appendix to this Handbook.

* The Chemistry Department November exam period supersedes the October exam period specified by the Graduate School.

Academic Evaluation

Students are evaluated on an on-going basis by their research advisor, their Advisory Committee, and the Director of Graduate Studies. Readmission to a subsequent academic year is based on progress and conduct during the previous year.

Withdrawal from the graduate program may be required in the following instances:

1. Student has failed to satisfy all seven components of the General Examination by the end of the third year.

2. Student has failed the General Exam twice.
3. Student fails to improve research and/or academic performance despite repeated warnings.
4. Disciplinary action imposed by the Graduate School or the Department of Chemistry.

Third Year Seminars

In the third year of study, students present a thirty-minute seminar on their research progress. The focus of the seminar should be on actual research results in the laboratory and not a history of the project. The seminar should be treated as a formal exercise to enhance presentation skills and public speaking abilities, through the preparation of a PowerPoint presentation and the organization of the seminar.

To foster understanding of the different chemical disciplines, third year students are required to attend all seminars. The two best seminar presentations (as judged by a committee of 4th year students) are granted the Wyeth Award, consisting of a \$500 cash prize plus a \$2,000 allowance for travel to scientific meetings.

Original Research Proposal prior to Final Public Oral (FPO)

Prior to the defense of his or her thesis at the Final Public Oral, the student will generate a second original research proposal, not directly related to the thesis research, and defend it before the advisory committee. It is **strongly** recommended that this be done well before the FPO, preferably during the 4th year so that it does not conflict with thesis work.

The proposal must be written and circulated (via hard copy) among the advisory committee **at least two weeks before the oral presentation date**. The student is responsible for organizing the committee members to meet for this oral exam and informing the Graduate Administrator prior to the date agreed upon. The committee records a grade for the written proposal and its oral defense. Grading is on a scale from Excellent to Fail.

See the Appendix of this Handbook for preparation guidelines for the second original proposal.

Dissertation

Students satisfy the bulk of the formal course and examination requirements for the Ph.D. by the end of the second year of graduate study. The remainder of the program is devoted to independent research work leading to the writing of a dissertation.

The dissertation must show that the candidate has technical mastery of the field and is capable of doing independent research. This study must enlarge or modify current knowledge in a field or present a significant new interpretation of known materials.

The dissertation is reviewed and approved by at least two principal readers before being submitted for acceptance to the Graduate School. The thesis advisor and a second committee member will serve as readers. The dissertation should first be given to the advisor and, once it has been approved by the advisor, it should be given to the second reader. At least two weeks are to be allowed for each reader. Time must also be set aside to respond to the readers suggested changes.

The Graduate School requires all reader's reports and other documentation be received in their office at least two weeks before the Final Public Oral examination. Therefore, students should allow five weeks from the date of giving the thesis to the second reader to the date of the FPO. **A Thesis and FPO checklist can be found in the Appendix of this Handbook.**

If the candidate and/or the advisor want the dissertation to be reviewed for possible patentable results and subsequent patent application either by the University or by a non-University agent, or have the dissertation reviewed by an outside sponsor for the proprietary information or results, these processes must be completed before the department requests to hold the Final Public Oral examination (for more information, contact the Office of Technology and Intellectual Property Licensing, New South Building.)

In order that certain minimum standards of uniformity are observed in the publishing process, the University archivist has established a format for the thesis and procedures for its deposition with the University archives. See the Mudd Library website for specific details.

Final Public Oral Examination

The advisory committee (plus one additional faculty member, selected by the student and his/her advisor) serves as the final thesis committee and conducts the Final Public Oral (FPO) examination, the last formal requirement for the Ph.D.

The FPO consists of a public lecture on the thesis research, usually of about one hour in length. During this presentation, the public and the thesis committee may question the student about the research. Following the thesis presentation, the committee meets to evaluate the student's performance. Grading is again on a scale from Excellent to Fail. Marks for the written proposal and its oral defense are combined for an overall Final Public Oral Examination grade. If the assigned grade is Passing or better, the requirements for the Ph.D. have been completed, and the degree is awarded.

Students who successfully defend the FPO by May 1 are invited to participate in Commencement in June. Students who defend later than May 1 may participate in Commencement the following June.

If the student does not pass the final public oral examination, he or she may request to retake the examination within one year. If unsuccessful a second time, the candidate is not permitted another opportunity to retake the examination, and Ph.D. candidacy is terminated.

Additional information about the degree application and completion process may be found on the Graduate School website, <http://gso.princeton.edu>, and in the Appendix of this handbook.

Vacation Policy

Graduate study is understood to be a full-time commitment on the part of students. During an academic year, defined at September 1 to August 31, graduate student degree candidates may take up to (but no more than) four weeks of vacation, including any days taken during regular University holidays and scheduled recesses (e.g. the Fall and Spring Term breaks and inter-term break). The specific periods taken as vacation must not conflict with the student's academic responsibilities, coursework, research, or teaching. **Before scheduling vacations, students must talk with their advisor.**

If a student is an Assistant in Instruction, they must also secure leave approval from their teaching supervisor(s). As a general rule, AI's will NOT be allowed to take vacation during weeks that classes are in session or during reading period and exam time. AI's who take vacation without receiving leave approval from their teaching supervisor(s), will have the vacation time deducted from their pay.

International students who plan to travel abroad must contact the University's Visa Office to ensure that they comply with their visa regulations and do not experience any difficulty returning to the United States.

Safety Policy

- All students must take the laboratory safety training offered by Princeton's office of Environmental Health and Safety (EHS). Students who do not take this course will not be permitted to work in a lab.
- Appropriate clothing and footwear must be worn in the lab at all times.
- Two lab coats will be provided to each student working in a wet lab and these should be worn whenever the student is in the lab.
- Any student who is injured while working in a lab, **must** file an injury report with Janet Gruschow, the Department Manager.
- Students should go to the EHS website, <http://www.princeton.edu/ehs>, for further information on safety issues, hazardous materials, etc.

STUDENT STATUS

Enrollment

Incoming graduate students are considered enrolled from the date of registration in September to the end of the following June. If the student has been granted readmission (see below), he/she will advance to the next year of study beginning July 1 and continuing through to the end of the following June.

Ph.D. candidates who have completed their full course of enrollment (five years) but have not yet defended their thesis, remain enrolled through August 31 of their last year of study. On September 1 the status changes to Dissertation Completion Enrollment (DCE) or, in some circumstances, to Enrollment Terminated/Degree Candidacy Continues (ET/DCC). See below for more information on DCE and ET/DCC status.

Reenrollment

Reenrollment is the annual academic review of current graduate students' academic progress and the departments' recommendations as to whether students should or should not continue in their program. The purpose of reenrollment is to give students, their departments, and the Graduate School a clear picture of student progress toward degree objectives, to identify and correct problems, and to set or confirm academic goals for each student in the next year of study.

All students must apply for reenrollment in the spring of each year of the approved program of study in which they are enrolled. Reenrollment, which must be recommended by the student's department, entitles students to continue to consult faculty members and to use laboratories, libraries, computing resources, and other University facilities.

Satisfactory academic progress is measured by the department. For students who have not yet taken the general examination, this includes completing high-quality work in courses and seminars, satisfying the distribution requirements, and performing effectively in the research group. For students who have sustained the general examination, significant progress toward the completion of the dissertation is the central criterion.

In Absentia Status

Students may be recommended for readmission with 'in absentia' status if they need to use educational resources that are not available in Princeton. In absentia status is granted for one year at a time, up to two years, to students who have successfully completed their general examination.

Students may be recommended for 'in absentia' status for either a term or a year if the following criteria are met:

- a need to use educational resources that cannot be obtained in Princeton;

- the work away from Princeton will contribute to the student's progress to the degree;
- the student will not physically live in Princeton or the immediate vicinity, i.e. will not be in residence.

Students in absentia are considered fully enrolled graduate students and enjoy the same health insurance benefits as students in residence.

In the Chemistry Department, 'in absentia' status is typically granted to students whose academic advisor leaves Princeton for another university. Such students continue to work with their advisor at the new institution but receive a Princeton degree. Students who wish to perform research at a national laboratory or other off-site research facility may also apply for in absentia status.

Leave of Absence Status

On the recommendation of the Director of Graduate Studies, the Graduate School may grant a year's leave of absence at any one time to students in good standing. Leaves are granted for personal reasons, when the student will not be actively pursuing an academic course of study in fulfillment of Princeton's degree requirements.

Students on leave have withdrawn formally from the graduate program and are not considered enrolled or registered students. Accordingly, no University student benefits continue. An extension of up to one additional year may be granted if the student so requests, but no longer. At that point, if the student does not return to the graduate program, his or her degree candidacy is terminated; in order to return to graduate work at a later time, the student must formally reapply. Leaves should be timed, whenever possible, to come at the end of a term and preferably at the end of a full academic year. Readmission after leave is subject to confirmation of continued professional suitability and a written request for readmission. The student's original advisor is not required to readmit the student to their research group.

Leaves are not granted to students who

- (1) have completed less than one full term of enrollment in residence, OR
- (2) are scheduled to take their General Examination in the term for which the leave is being requested, OR
- (3) will be working essentially full time on their Princeton degree requirements, although away from Princeton (for which in absentia status is normally recommended).

Termination

The Graduate School may also terminate a student's degree candidacy when, upon recommendation of the department, the student has not made satisfactory academic progress or when a student on leave has not requested readmission. In the case of Ph.D. students in particular, degree candidacy terminates automatically after a second failure of the General Examination or in cases where the student has not maintained regular contact with the department and dissertation adviser.

Dissertation Completion Enrollment (DCE)

DCE status carries most of the benefits of enrolled student status and as DCE students must be working full time on completing their dissertation, they may not enroll in courses. Students may first choose DCE status in the last year of their regular academic program and it may then be held continuously for up to two years.

DCE status ends:

- a) when the student successfully completes and defends the dissertation OR
- b) when the student chooses not to apply for reenrollment OR
- c) when the department does not recommend the student for reenrollment OR
- d) when the two-year period of DCE eligibility expires. Non-graduating students leaving DCE status will be given ET/DCC status as defined below.

Once having left DCE status, the student cannot apply to return to DCE status; enrollment in DCE status must be continuous, beginning immediately after the department's regular program length has ended, up to the two-year limit.

Enrollment Terminated/Degree Candidacy Continues (ET/DCC)

A student enters ET/DCC status if they are beyond the department's regular program length, are not in DCE status and have not graduated. ET/DCC is an unenrolled status in which students are ineligible for the student benefits that come with formal enrollment, including DCE status. For ET/DCC students, library access and student borrowing privileges (for those in Princeton or the vicinity), and e-mail and computer account access will continue for a period of five years beyond the date of the General Examination. Students who choose ET/DCC status may be appointed as part-time Lecturers through the Dean of the Faculty's Office.

If a student presents a doctoral dissertation more than five years after he or she has passed the general examination, the department is not automatically obliged to receive it for consideration.

FUNDING INFORMATION

Students in the Chemistry department are provided funding for their period of enrollment, usually 5 years. For the first-year of study, the Graduate School provides fellowship and tuition payment; in subsequent years, students are funded through department funds, assistantships in instruction (teaching positions), research grants, or a combination thereof.

Typically, students who work as assistants in instruction (AI's) earn slightly more than students who work in the laboratory as assistants in research (AR's). Both categories earn more after successful completion of the General Examination.

Outside Funding

Students are encouraged to apply for outside sources of funding. **The University gives students who receive outside funding an additional \$4,000 above the standard stipend for each year that they hold the outside funding. If the student already receives additional funds above the standard stipend through a University or Departmental Award such as a Centennial Fellowship or a Hugh Stott Taylor Award (HST), no further additional funds will be provided unless the amount is less than \$4,000 in which case it will be "topped-up" to reach a total of \$4,000.**

Outside funding opportunities include:

- ***NSF Graduate Research Fellowship:*** National Science Foundation fellowships for US citizens & permanent residents in their first or second year of graduate study. Apply in summer/early fall, deadline first week of November.
- ***NDSEG Fellowship:*** National Defense Science and Engineering Graduate Fellowships for US citizens/permanent residents; January application deadline.
- ***DOE Computational Science Fellowship:*** Four-year fellowship for computational scientists in their first or second year of graduate study. The fellowship includes research opportunity at a DOE laboratory; US citizens/permanent residents whose research includes high-performance computing. Application deadline is mid-January.
- ***Hertz Foundation Graduate Fellowship:*** For US citizens/permanent residents who are willing to morally commit to make their skills available to the United States in time of national emergency. Evidence of exceptional creativity, broad understanding of physical principles and outstanding potential for innovative research is expected. Application deadline is end October.
- ***Ford Foundation Fellowships for Minorities:*** Predoctoral, dissertation and post-doctoral fellowships for US citizens/permanent residents who are ethnic minorities and planning careers in university teaching/research. Deadline is November/December.
- ***Smithsonian Institution Fellowship:*** The Smithsonian offers post-doctoral and pre-doctoral fellowships in Materials Research. Application deadline is mid-January.
- ***Dept of Homeland Security Fellowship:*** U.S. citizens may apply in spring of first year of graduate study. Annual award includes summer internship and probable employment after degree completion.

Departmental Awards

The Chemistry Department offers numerous fellowships and awards to recognize outstanding students. These include:

Teaching Awards:

- **Pickering Teaching Awards** – Cash prizes granted each year to superb Assistants in Instruction, typically those teaching for the first time.
- **Hubert Alyea '24 Teaching Award** – Recognizes upper-class students who have excelled at undergraduate teaching throughout their graduate career.
- **Sokol Fellowship** – Recognizes superb TAs who are interested in teaching after degree completion.

Merit Awards:

- **Badin *45 Graduate Student Prize:** Cash award granted every other year to the department's top second-year graduate student.
- **Bristol-Myers Squibb Fellowship in Organic Synthesis:** Includes fellowship support, travel expenses to scientific meetings, a mentor at BMS and the opportunity to speak at research symposia at both Princeton and BMS.
- **Eli-Lilly Edward C. Taylor Fellowship in Chemistry:** For outstanding post-generals graduate students interested in the fields of biochemistry and organic chemistry.
- **McKinney '50 Life Sciences Fellowship:** Awarded to a top first-year student interested in organic or biochemistry or other chemistry with medical implications. This replaces the First Year Science and Engineering Fellowship.
- **Patchett Summer Fellowship:** Acknowledges outstanding senior graduate students in organic chemistry.
- **Third Year Seminar Award:** Granted to the two best third-year seminar speakers each year, includes educational/travel expense account and cash prize.

University Awards

From time to time, the Chemistry Department may nominate an outstanding student for a University-wide award. These honors include:

- **APGA Teaching Prize** – Cash award for outstanding TAs across all disciplines, relies heavily on recommendations from undergraduate students
- **Grimm Memorial Prize** – For outstanding graduate students in computational physics
- **Honorific Fellowships** – The highest honor bestowed by the Graduate School, these one-year fellowships are awarded to top graduate students across all disciplines in the final year of enrollment.

University Funds

The University also has limited funds available to assist graduate students with some travel and medical expenses. These funds include:

The Dean's Fund for Scholarly Travel

The Graduate School offers grants of up to \$600 to cover travel costs for students invited to present a paper at conferences and professional meetings. Students are encouraged to apply for assistance as soon as they receive an invitation to present a paper. There are three application deadlines per year, September 1, December 1 and March 1.

Applicants must have been invited to deliver a paper that represents their own work and must show proof of a paper's acceptance at the conference. Giving a poster presentation, serving as a discussant or respondent on a panel, giving a job talk, etc., do not qualify for support. Eligibility is restricted to Ph.D. students who are third year through the first DCE year; preference in awarding is given to humanities and social science students in these years, and science and engineering students in higher years of study (e.g., 4th, 5th, and DCE). There is a short application form requiring the student's advisor's review and approval.

A full description of the Dean's Fund process, and the application form, may be found on the Graduate School website at <http://gso.princeton.edu/financial/travel/deansfund/>.

Assistance with Medical Expenses

Special Graduate School funds exist to assist enrolled graduate students with unreimbursed medical expenses which create a financial hardship for them. Assistance takes the form of a grant to reimburse expenses not covered by insurance. Students must first submit insurance claims and determine out-of-pocket expenses before applying for assistance through these funds.

More information may be found on the Graduate Student Life website, <http://gso.princeton.edu>

RELATED PROGRAMS AND INSTITUTES

Program in Neuroscience

Students may earn a degree of doctor of philosophy in chemistry and neuroscience through the interdisciplinary Program in Neuroscience. The program encourages the serious study of molecular, cellular, developmental and systems neuroscience as it interfaces with cognitive and behavioral research. Current examples at Princeton include: molecular, genetic and pharmacologic analysis of learning and memory, the role of neural stem cells in the adult brain, viral infections of the nervous system, optical and electrical recordings of neuronal function, brain imaging studies of cognitive functions such as attention and memory in humans, and mathematical and computational analysis of neural network function.

Departments participating in the Neuroscience program include Chemistry, Ecology and Evolutionary Biology, Molecular Biology, Philosophy, Physics, Psychology, departments in the School of Engineering, and the Program in Applied and Computational Mathematics.

Upon entering the program, an adviser is selected who is normally a member of the student's department and is affiliated with the program. A plan of study is prepared by the student and the adviser, following the student's major interest and in keeping with the goals of the program. The plan of study should provide depth in one methodological area and breadth in some areas of practical concern. All students are expected to participate in the weekly neuroscience seminar (PSY 511). Additional course selections are made in consultation with the student's faculty advisor, based on the student's background and interests and in accord with the requirements for the Ph.D. program in the student's home department. Students must satisfy the normal academic requirements and pass the general examination of their respective departments.

Princeton Environmental Institute

The Princeton Environmental Institute (PEI) is an interdisciplinary research program involving more than 50 associated faculty members in the natural sciences, engineering, social sciences and humanities. The program focuses chiefly in the sciences, with particular strengths in global change, biogeochemical cycles, molecular geochemistry, biodiversity and conservation, and environmental science and policy. It is organized principally through its four centers: the Carbon Mitigation Initiative, the Carbon Modeling Consortium, the Center for Environmental BioInorganic Chemistry, and the Center for Biocomplexity. In addition, individual faculty members conduct their own environmental research.

A central component of the PEI graduate program is the Science, Technology, and Environmental Policy Program (PEI-STEP). This two-year program enables participating graduate students to add a policy dimension to their basic science or technology work. PEI-STEP students write an independent paper on their policy research, which is the equivalent of a

chapter in the thesis. Students who complete PEI-STEP are awarded the Graduate Certificate in Science, Technology and Public Policy from the Woodrow Wilson School of Public and International Affairs.

Princeton Institute for the Science and Technology of Materials

Several Chemistry department faculty members are affiliated with the Princeton Institute for the Science and Technology of Materials (PRISM), a multidisciplinary center in the general field of materials science. PRISM was formed in November 2003 through the combination of PMI (Princeton Materials Institute) and POEM (Center for Photonics and Optoelectronic Materials).

PRISM's mission includes graduate and undergraduate education and research which will have a long-term impact on society. Key elements of PRISM are the integration of the sciences and engineering, with work spanning from fundamental theory through to applications, and the integration of their work with that outside Princeton, especially with industry.

A special focus of PRISM is the rapidly growing intersection of hard materials (such as conventional semiconductors, metals, ceramics), and soft materials (polymers, organic and biological molecules, fluids, cells, proteins ...) and all of the fields which fundamentally underpin this work. Work at this intersection includes organic and large-area electronics, self-organizing structures, biomedical imaging, nanostructures, microfluidics, bio-chips, quantum information systems, and many other emerging opportunities.

PRISM-associated facilities on campus include the Micro/nano Fabrication Lab, the Imaging and Analysis Center, the Keck Computational Center, and the Ultrafast Laser Facility.

Research at PRISM is funded by a wide range of government agencies, industries, and foundations. Programs of special note at PRISM include the Princeton Center for Complex Materials (PCCM), the National Science Foundation Materials Research Science and Engineering Center (NSF MRSEC) program, NSF Engineering Research Center for Mid-InfraRed technologies for Health and the Environment (MIRTHE) and several multi-disciplinary Centers in emerging research fields funded by the New Jersey Commission on Science and Technology (NJCST).

Graduate Program in Materials

The Graduate Program in Materials, an interdisciplinary Ph.D. program, allows students to pursue materials-related research and education in coordination with engineering and science departments affiliated with PRISM and to receive a Ph.D. in Chemistry and Materials. Requirements for this degree are given on the next page. In addition to the resources of the institute and the affiliated departments, the program draws upon the resources of industrial affiliates as well as other materials-oriented research centers within the University. The breadth and flexibility of the program accommodate a wide range of interests and give students both the theoretical foundation and practical knowledge they need to function in the rapidly

developing field of modern materials. The following is from the PRISM website as it pertains to Chemistry:

Materials in Chemistry

Chemistry and materials go hand-in-hand in many ways, and materials chemistry is presently one of the most vital and expanding areas in research and education. Truly interdisciplinary research is essential for progress in this area, with the resulting discoveries and insights that such an interdisciplinary approach in science often yields.

Research in academic, industrial, and government institutions is directed towards answering fundamental questions in chemistry that may lead to new materials, the application of chemical and materials knowledge for improving the performance of devices and systems, and making possible the technologies and processes of the future. Materials-related research in chemistry at Princeton encompasses many of the diverse new paths this type of research presently embodies.

Our program ranges from theoretical, through basic science, to more applied areas. Research in theoretical materials chemistry includes, for example, the molecular dynamics simulation of materials properties and the electronic structure theory of surfaces, molecular crystals, and conjugated polymers. There are a wide variety of opportunities to conduct research on materials surfaces, including the study of the adsorption and spectroscopy of molecules and chemical reactions on transition-metal surfaces, and the synthesis and characterization of oxide-supported organometallic complexes. There are also research efforts in the assembly of biogenic hard materials, photochemical energy conversion, solar energy conversion and electrochemistry, the synthesis and characterization of solids with exotic electronic and magnetic properties, and optoelectronic properties of organic thin films.

The materials chemistry program at Princeton provides a unique interdisciplinary opportunity for students to pursue their interests in this rapidly advancing field. Students may tailor their program by combining different aspects of education and research in materials and chemistry and other areas such as electronics, physics, or biology to create their own interdisciplinary specialty.

Requirements for a Ph.D. in Chemistry & Materials are:

- 2 courses in Materials Science & Engineering at the 500 level.
- Ph.D. thesis in the area of Chemistry of Materials
- A Materials Science Professor from outside the Chemistry Department must be on the Ph.D. committee.

CHEMISTRY DEPARTMENT ORGANIZATIONS AND ACTIVITIES

Corporate Recruiting

Many pharmaceutical and chemical companies interview graduate and post-doctoral students during the fall semester. The department collects student CV's during the summer; corporate representatives pre-select candidates with whom they wish to meet, and interviews occur on-campus in October and November.

Graduate Student Organization (GSO)

The Chemistry GSO comprises graduate students from all years of study. The GSO's foremost function is to serve as a communication channel between the graduate students and the faculty, but it also organizes social activities and assists with recruitment and orientation. It also sponsors the Student Invitational Lecture Series, which are monthly seminars given by researchers chosen by students.

Social Hour

Graduate students and postdocs mingle on Friday afternoons in the Atrium or, in nice weather, in the Frick South Courtyard. Beer, soda and snacks are provided.

Sports Teams

Chemistry graduate students regularly compete against other departments in such sports as softball, basketball, and soccer. Students play on teams during intramural season and in informal pick-up games during the summer.

Friixer

Typically held the first or second Friday after the start of classes, the annual department mixer offers incoming students a chance to mingle with other students, faculty and staff. Food, beverages and entertainment are provided by the GSO.

Frickmas

Each December, the third-year graduate students host a holiday party for graduate students, faculty and staff. The event's high point is a skit that manages to roast every faculty member in one light-hearted way or another!

Fricknic

Organized by first-year graduate students, Fricknic is an end-of-year picnic for graduate students, post-docs, faculty and staff. This June event tends to be more family-friendly than other department events, and includes a barbecue and a variety of games and activities.

CHEMISTRY DEPARTMENT ADMINISTRATION & STAFF

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Carlos Pacheco	Sr. NMR Spectroscopist	Kitty Wagner	Lecture Demonstrator

Purchasing and Receiving:

Vicky Lloyd	Purchasing
Kevin Wilkes	Purchasing/Stockroom
Phil Fairall	Stockroom/ Shipping & Receiving

CHEMISTRY DEPARTMENT FACULTY

**** denotes faculty not taking graduate student advisees**

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APPENDIX

USEFUL ABBREVIATIONS

ACS	American Chemical Society
AI	Assistant in Instruction (Teaching Assistant)
AR	Assistant in Research (Research Assistant)
CEBIC	Center for Environmental Bioinorganic Chemistry
CMBI	Center for Molecular and Biomolecular Imaging
CSBMB	Center for the Study of Brain, Mind and Behavior
DCE	Dissertation Completion Enrollment
DGS	Director of Graduate Studies
ETDCC	Enrollment Terminated Degree Candidacy Continues
FPO	Final Public Oral (oral defense of the thesis)
GSO	Graduate Student Organization
MRSEC	Materials Research Science and Engineering Center
PACM	Program in Applied and Computational Mathematics
PCCM	Princeton Center for Complex Materials
PEI	Princeton Environmental Institute
PRISM	Princeton Institute for the Science and Technology of Materials
VRSC	Visiting Student Research Collaborator

GUIDELINES FOR THE GENERAL EXAMINATION

The General Examination committee will be comprised of the student's two advisory committee members and a chairperson assigned by the DGS. The chair is "out-of-field" and is only on the generals committee, i.e. they do not become a member of the advisory committee for the FPO. The student's advisor will be present at the exam and will be able to ask questions but will not participate in the committee discussion at the conclusion of the exam.

At the start of the exam, the student will be asked to leave the room for a few minutes so that the committee can discuss the written proposal and the advisor's evaluation letter. Once the student returns to the room they will present an approximately 25/30-minute seminar type talk on their proposed thesis research using PowerPoint or Keynote. The committee may interrupt the presentation to ask questions. The student should also be prepared to use the blackboard as necessary. After the presentation, the exam committee will question the student to get a sense of how prepared they are to continue doing thesis research at Princeton. The committee might also ask some general chemistry questions. This part of the exam will take about 30 minutes.

The student will then make a second seminar type presentation of their independent research proposal. This should also take about 25/30 minutes and will be followed by questions from the committee, following a format similar to the thesis proposal examination.

When the committee has finished asking questions, the student and the advisor will leave the room while the exam committee discusses the presentations and responses to questions. When the committee, in consultation with the advisor, has decided upon a final Generals Exam grade (Pass, Fail, or Pass with Distinction), they call the student back into the room. At this point, they should give the student some feedback about the student's presentation and progress.

As was noted on Page 6 of this handbook, it is possible for a student to pass the thesis research portion of the exam but fail the independent proposal.

Thesis Research Proposal Guidelines

The Thesis Research Proposal is a brief document (approximately 15 pages of text and figures plus reference pages) that provides a basis for the oral portion of the General Examination. It is recommended that it be organized as suggested below, somewhat on the model of a standard NSF proposal.

- 1. Background and significance.** This section should answer the question, "why is the proposed work important?" Briefly sketch the background to the present proposal, critically evaluate existing knowledge, and identify gaps in our present understanding. This exposition is intended to place the proposed work into a broader scientific context, and to provide clear and logical motivation for both the general approach and the specific aims (point 2 below) of the present proposal.

2. **Specific aims.** This section is intended to answer, in very specific terms, the question, “what do you propose to do?” No background or other narrative material belongs in this section; it is not meant to stand alone, nor to provide details about the experimental system, but rather to provide a succinct and specific summary of the planned research. This section could, for example, consist of little more than a well-organized outline describing questions to be answered, hypotheses to be tested, and experiments to be conducted. It is probably most helpful to write this section only after writing the rest of the proposal.
3. **Experimental design and feasibility.** This section should parallel Specific Aims and should answer the question, “how will you do the proposed work?” Describe each experiment you will conduct and how you will analyze the data and interpret the results. Provide appropriate calculations or cite literature data to support the feasibility of the experiments you propose. Supporting evidence that comes from unpublished work must be clearly identified as such, and specifically attributed. Discuss potential pitfalls of any proposed experiments that lack clear precedent and propose alternative approaches to achieve the aims. Indicate how each of your proposed experiments will address the gaps in present knowledge, and, for any gaps that will not be addressed, discuss why.
4. **Progress report.** Describe your thesis project briefly. Provide a progress report on your work to date, making very clear which contributions are yours and which are not. If you have made any observations or developments that are new, describe in detail what you did, and how. Discuss the relationship of your thesis work to the broad, long-term interests and objectives of your research group and, in turn, relate your thesis topic and your group's interests to your proposal. It is understood that these relationships vary in different research groups, and that the thesis work may yet evolve in directions different from those you envision now. It is understood that individual progress will vary.
5. **Complete citations, including all authors and the titles** of research articles or book chapters, must be included in the list of references.

Independent Research Proposal Guidelines

The independent research proposal should be modeled after a standard NSF proposal and should be no more than 15 pages in length, including figures, with references in addition. However, before undertaking the writing of the actual proposal, you should prepare a one page summary of your idea and send it to your advisory committee for review. The advisory committee will determine whether this second proposal is sufficiently independent from the thesis research. You should only proceed with the actual proposal once your committee agrees that your idea is sufficiently independent and gives you their approval.

The proposal should be organized as suggested below:

1. Background and significance

This section should answer the question: *Why is the proposed work important?*

Briefly sketch the background to the present proposal, critically evaluate existing knowledge, and identify gaps in our present understanding. This exposition is intended to place the proposed work into a broader scientific context and to provide clear and logical motivation for both the general approach and the specific aims (see below) of the present proposal.

This section may need to occupy as many as 3-4 pages.

2. Specific aims

This section is intended to answer, in very specific terms, the question: *What do you propose to do?*

No background or other narrative material belongs in this section; it is not meant to stand alone, nor to provide details about the experimental system, but rather to provide a succinct and specific summary of the planned research. This section could, for example, consist of little more than a well-organized outline describing questions to be answered, hypotheses to be tested, and experiments to be conducted.

It is probably most helpful to write this section after writing the rest of the proposal. It should occupy no more than one page.

3. Experimental design and feasibility

This section should parallel Specific Aims and should answer the question: *How will you do the proposed work?*

Describe each experiment you propose to conduct and how you will analyze the data and interpret the results. Provide appropriate calculations or cite literature data to support the feasibility of the experiments you propose. Supporting evidence that comes from unpublished work must be clearly identified as such and specifically attributed. Discuss potential pitfalls of any proposed experiments that lack clear precedent, and propose alternative approaches to achieve the aims. Indicate how each of your proposed experiments will address the gaps in present knowledge and, for any gaps that will not be addressed, discuss why they are not being addressed.

This section may need to occupy as many as 3-4 pages.

4. References

The list of references must include complete citations, including all authors and the titles of research articles or book chapters.

GUIDELINES FOR PREPARING THE PRE-FPO ORIGINAL RESEARCH PROPOSAL

Prior to the defense of their thesis at the Final Public Oral, the student will generate an original research proposal, not related to the thesis research, and defend it before the advisory committee. It is strongly recommended that this be done well before the FPO so that it does not conflict with thesis work, preferably during the 4th year so that it does not conflict with thesis work.

The “out of field” research proposal must be written and circulated (via hard copy) among the advisory committee at least two weeks before the oral presentation date. The student is responsible for organizing the committee members to meet for this oral exam and informing the Graduate Administrator prior to the date agreed upon. The committee records a grade for the written proposal and its oral defense. Grading is on a scale from Excellent to Fail. Again, this written proposal is a brief document, modeled after a standard NSF proposal. **It should be no more than 15 pages in length including figures, with references in addition.** It might be organized as suggested below:

1. Background and significance

This section should answer the question: *Why is the proposed work important?*

Briefly sketch the background to the present proposal, critically evaluate existing knowledge, and identify gaps in our present understanding. This exposition is intended to place the proposed work into a broader scientific context and to provide clear and logical motivation for both the general approach and the specific aims (see below) of the present proposal.

This section may need to occupy as many as 3-4 pages.

2. Specific aims

This section is intended to answer, in very specific terms, the question: *What do you propose to do?*

No background or other narrative material belongs in this section; it is not meant to stand alone, nor to provide details about the experimental system, but rather to provide a succinct and specific summary of the planned research. This section could, for example, consist of little more than a well-organized outline describing questions to be answered, hypotheses to be tested, and experiments to be conducted.

It is probably most helpful to write this section after writing the rest of the proposal. It should occupy no more than one page.

3. Experimental design and feasibility

This section should parallel Specific Aims and should answer the question: *How will you do the proposed work?*

Describe each experiment you propose to conduct and how you will analyze the data and interpret the results. Provide appropriate calculations or cite literature data to support the feasibility of the experiments you propose. Supporting evidence that comes from unpublished work must be clearly identified as such and specifically attributed. Discuss potential pitfalls of any proposed experiments that lack clear precedent, and propose alternative approaches to achieve the aims. Indicate how each of your proposed experiments will address the gaps in present knowledge and, for any gaps that will not be addressed, discuss why they are not being addressed.

This section may need to occupy as many as 3-4 pages.

4. References

The list of references must include complete citations, including all authors and the titles of research articles or book chapters.

THESIS & FINAL PUBLIC ORAL CHECKLIST

Before writing:

- Carefully read all information on the Mudd Library thesis website, <http://www.princeton.edu/~mudd/thesis/index.shtml>. This will provide you with all needed information about formatting and binding your thesis. You MUST follow the format required by Mudd. Please make special note of how to format the title page, which must list your advisor's name. This site also provides information on publishing your thesis.
- For citation styles, follow the standard ACS style, details of which can be found at www.acs.org

At least six weeks before FPO target date:

- Choose one member of thesis committee to serve as second reader of thesis
- Submit thesis draft to advisor
- Find a fourth member for your committee. This person must attend both your out-of-field proposal and your FPO.

At least four weeks before FPO:

- Submit final thesis draft to advisor and second reader
- Incorporate reader comments and proofread!
- Finalize dates, times when committee is available for FPO

- Book a room for the FPO

At least two weeks before FPO:

- Apply on-line for your Advanced Degree. You will upload the following:
 - **TITLE PAGE OF THE DISSERTATION** (The correct degree award date, as on the Degree Application Form, Trustees' Meeting date, month and year only, must appear at the bottom of the title page.)
 - **DISSERTATION ABSTRACT** (*Strongly recommended not to exceed 350 words*)
- The following is to be submitted to the Graduate Administrator:
 - **PRIOR PRESENTATION AND PUBLICATION FORM** (Signed by the Advisor)
 - **READERS' REPORTS** (1 from your advisor, 1 from your second reader.)
 - **DISSERTATION – ONE BOUND AND/OR FINAL COPY**

Forms can be found at <http://gso.princeton.edu/forms/acadforms/>

One week before FPO:

- Confirm FPO date, time with thesis committee
- Pick up termination forms, etc., from the Graduate Administrator. At that time you will be given full information of the forms you will need to complete for submitting your dissertation to Mudd Library. All the forms can be completed on-line.

Day of FPO:

- Arrive ½ hour early to set up
- Bring bound thesis from Graduate Administrator's office to FPO

GRADUATE SCHOOL
ALCOHOLIC BEVERAGE POLICY

(From the Office of Graduate Student Life)

Graduate students at Princeton University are expected to be acquainted with and to abide by both State and University regulations regarding the consumption of alcohol. They are also expected to be aware of the social, physiological, and psychological consequences of excessive drinking in order to make responsible and informed decisions about the serving and consumption of alcohol. The University provides regular educational programs on alcohol and drug abuse, as well as counseling services.

The University alcoholic beverage policy is designed to be consistent with the laws of the State of New Jersey which, in general, prohibit the consumption and serving of alcoholic beverages by and to persons under 21 years of age. The policy also reflects the need for mutual respect and personal responsibility within a diverse community. Students are responsible for their behavior – whether or not they are under the influence of alcohol. Under no circumstances will the consumption of alcohol constitute a mitigating circumstance when it contributes to the violation of University regulations.

The University respects the right to privacy: its representatives will not enter dormitory rooms without substantive cause (i.e., without reasonable suspicion that University policies or regulations have been violated.) However, those individuals whose behavior infringes on the rights of others have, in essence, forfeited that privacy.

Alcoholic beverages will not normally be provided at University events where persons under the legal drinking age for consumption of alcoholic beverages are present. Those who are of legal drinking age and who wish to sponsor campus events with alcohol must comply with the guidelines established by the Office of the Dean of the Graduate School.

If given approval to serve alcoholic beverages, those organizing the event are responsible for ensuring that only those of legal drinking age are served. Availability of alcoholic beverages shall not be the primary focus of advertising for campus social events.

It is the primary responsibility of those in the presence of a severely intoxicated person to contact appropriate University or local medical or safety personnel (proctors, deans, McCosh Health Center Staff, Princeton Medical Center Staff, or local police or members of the rescue squad.) Intoxication will not be grounds for disciplinary action. Contacting the Department of Public Safety for assistance in transporting a student in need of medical attention will not, in itself, lead to disciplinary action. Disciplinary action will occur only if other circumstances indicating a violation of University policy are observed. In such an instance, the fact that students initiated a call for assistance will be considered a mitigating circumstance.

Guidelines

1. The sponsoring organization must file an Events Registration Form with the Associate Dean in the Office of Graduate Student Life, 202 Nassau Hall, 8-3028, at least three weeks prior to the event.
2. Functions which include the serving of alcoholic beverages should focus on activities and programs rather than on the consumption of alcohol. The advertising should reflect the purpose of the event, not the serving of alcohol.
3. When alcoholic beverages are served at an event, non-alcoholic beverages (such as soft drinks or cider) should also be available and visible.
4. Events at which alcoholic beverages are served should include the serving of food in visible, accessible areas; the quantity of salted foods, which result in thirst and additional drinking, should be limited.
5. Students are strongly urged to discourage peers from drinking excessively. When drinking becomes excessive and may result in destructive behavior or behavior which may threaten the safety of the individual or of others, those responsible for the event should notify a proctor and be prepared to assist the individual to the infirmary or to his/her dormitory room or apartment.
6. If the organization will charge for entry to the event or for alcoholic beverages, the New Jersey Division of Alcoholic Beverage Control's "Special Permit for Social Affairs" must be filed with the Office of Graduate Student Life, 202 Nassau Hall, and with the State Office in Trenton in a timely manner. State approval will come in the form of a license, which will permit the organization to charge for entry to the event or for alcoholic beverages. To meet state requirements, each attendee must provide proof of legal drinking age to an "ID checker" at the door and/or at the bar area.
7. If persons under 21 years of age will be present at the event, alcohol will be served in a designated area (e.g., beer garden) where access and consumption can be restricted to persons of legal drinking age.
8. The Associate Dean for Student Affairs of the Graduate School, in consultation with the Department of Public Safety and others, will determine what security/safety measures will be necessary (e.g., proctor, uniformed officer) for the event.
9. Although permission is not required for students over 21 years of age to host private parties in their apartments, alcohol guidelines will be available in the Office of Graduate Student Life, 202 Nassau Hall.