

THE GRADUATE PROGRAM IN PHARMACEUTICS & PHARMACEUTICAL CHEMISTRY

The Department of Pharmaceutics & Pharmaceutical Chemistry offers a Ph.D. degree program through the Graduate School of the University of Utah. The program seeks to prepare graduate students to function independently, competently and technically in a variety of settings including academic, research, administrative, business management, legal, regulatory and investment career tracks. This goal is accomplished through formal didactic courses, seminars and journal clubs, laboratory research rotations, and dissertation research. Every attempt is made by the faculty to help the student complete the program in a timely fashion. Typically, students graduate within 5 years of entering the program, although the nature of some projects and approaches requires a longer time commitment for full completion of the dissertation work.

Chair's Philosophy: The pursuit of a Ph.D. degree is a transient, temporary intensive professional training experience to be pursued and completed as directly and expediently as possible. As such it is neither a vocation nor a job. The doctoral experience is expected to be enriching and rigorous; the doctoral student is expected to be productive, professional and efficient. Financial support provided to each student is at the discretion of specific faculty advisor with specific technical objectives, deliverables and intellectual products anticipated and expected. This student-advisor relationship is augmented by fulfilling the formal didactic training components and by the input of the student's doctoral supervisory committee.

Department Mission Statement: The Department of Pharmaceutics and Pharmaceutical Chemistry seeks to create highly trained, versatile experts in the diverse sets of scientific and engineering disciplines that together represent the modern field of pharmaceutics. These experts will serve to lead the world's industries and academic institutions to forward the field, foster innovation and progress, and endeavor to improve human therapies to benefit their quality of life. The Department strives to be internationally recognized as a top-tier education and research program in pharmaceutics through innovative teaching and training, and creative research approaches to address challenging clinical problems.

I. GRADUATE STUDENT FINANCIAL SUPPORT AND TUITION

A. Stipend

Admission to the Ph.D. program generally includes a stipend (\$19,000 - \$26,000 as of 8/16/08) from the research advisor. A subsidy may be provided for individual health insurance at the research advisor's discretion. Stipend support for the period in which the student is conducting dissertation research is the responsibility of the student's faculty mentor and is normally derived from research grants. No Departmental funds are currently available for this purpose; no guarantees for graduate student financial support come from the Department, although it attempts to mediate extenuating circumstances and unusual hardships as resources might allow. Hence, the award of a research stipend is considered a privileged position for each student, one to be respected, and should be considered the primary means of support for the primary focus of the student in the program: expedient and efficient pursuit of the graduate degree. Stipends may also be rescinded by supervising faculty for documented student failure to progress both in research and in performing to minimal academic standards. While this can be a unilateral advisor decision, faculty-student relationships would best enroll the advice of the student's supervisory committee before withdrawing stipend support. Additionally, the University Policies and Procedures manual (PPM) (<http://www.admin.utah.edu/ppmanual/>) provides specific recommendations and process for addressing "failure to progress" and other student performance deficiencies with documentation, warnings, and written responses.

B. Fellowships

The Department supplies special Fellowship support to select students of exceptional qualifications as dictated by resources supplied by extra-university endowments. Faculty fellowship committees select students for annual awards and students are encouraged to seek out and apply for national and international fellowships to supplement or replace their stipend support. Stipend and fellowship support levels are determined by the faculty advisor although it is recognized that fellowship support is a distinction and therefore all fellowship support should remain the property of the student receiving this honorary award.

C. Outside Employment

The Department considers award of a full-time research stipend for graduate support to be a full-time traineeship with both the privilege of support and expectation of long irregular hours required for successful completion. Responsibilities of such conditions of graduate study preclude pursuit of other gainful employment without interference with program progress. Therefore, students are strongly discouraged from engaging in employment outside the Department. Such arrangements must be approved in writing in advance of the situation with the faculty advisor and supervisory committee. If a student is employed outside the Department, the student's supervisory committee and department faculty will monitor whether such employment interferes with the expectations of the program (i.e. the student's progress in course and research work, research or other program requirements). If the supervisory committee or department faculty determines that outside employment is unduly interfering with the student's doctoral progress, the student may be asked to reduce their outside employment commitments or to leave the program.

D. Academic Performance, Academic Standards and Standing

All graduate students are required to maintain good academic standing as defined by the Graduate School (<http://www.gradschool.utah.edu/catalog/grading.php>). Many privileges associated with graduate standing require this minimal academic performance. Students who fall below minimum academic performance requirements are placed immediately on academic probation for one semester. If these students fail to correct their record after one semester with subsequent improvements in academic performance so to maintain minimal standards as defined by the Graduate School, then they will lose benefits, including fellowships, tuition support, and stipend. This may require that they leave the program, either voluntarily or involuntarily.

D.1 Grades. As per the Graduate Student Handbook for the Graduate School at the University of Utah, "Candidates for graduate degrees are required to maintain a 3.0 or higher GPA in course work counted toward the degree (i.e. courses on the program of study). A grade below C- is not accepted for credit toward a graduate degree..."

The Department of Pharmaceutics further restricts lower grades: the Department does not accept grades below a B- for credit toward the graduate degree. Note that the 3.0 GPA requirement exists for didactic coursework and is not calculated with any non-didactic (e.g., research/dissertation or independent study) hours. A student whose GPA falls below a 3.0 for any given semester will be placed on academic probation for the following semester or until the GPA is brought above 3.0. Two or more semesters on academic probation are grounds to terminate the student from graduate study at Utah for poor academic performance.

D.2. Academic Standards. Academic standards for students in Pharmaceutics and Pharmaceutical Chemistry:

- a. GPA of 3.0 or higher in all didactic coursework is required
- b. Laboratory rotations, when applicable, must be satisfactorily completed.

- c. Academic dishonesty is not allowed. Dishonesty or misconduct is defined by the National Academy of Sciences, the University of Utah Student Code, or this policy statement. Cheating, plagiarism, and other forms of academic dishonesty are defined below.

Action will be taken in cases of failure to meet academic standards that may include grade reduction, failing grade, probation, or dismissal from the University. Note that two students recently were expelled from the University of Utah for violations in academic dishonesty. In other words, this situation is not to be taken lightly.

E. Tuition

Tuition waivers for full-time graduate students in good academic standing are available to qualified graduate students compensated through University of Utah research accounts (i.e., from Pharmaceutics faculty member or Departmental fellowship accounts) under the Graduate School's *Tuition Benefit Program (TBP)*. Details of the TBP can be found at the Graduate School's website (<http://www.gradschool.utah.edu/tbp/guidelines.php>). This benefit covers general graduate tuition and mandatory fees. Tuition for undergraduate courses is the responsibility of the student.

Students may participate in the TBP for a limited number of semesters, which need not be sequential. Participation limitations in the program are as follows:

E1. Students in a Master's program are limited to two years (4 semesters) of tuition benefit support.

E2. Students in a doctoral program who entered with a Bachelor's degree are limited to five years (10 semesters) of tuition benefit support.

E3. Students in a doctoral program who also received a Master's degree at the University of Utah are limited to five years of tuition benefit support (2 years for a Master's + 3 additional years for a doctorate).

E4. Students entering a doctoral program with a Master's degree from another university are eligible for four years (8 semesters) of tuition benefit support.

Students must be enrolled for 9-11 semester hours of graduate coursework (5000 level or above) in both the fall and spring semesters. Students covered by the TBP through the graduate school can, but need not, register for 3 semester hours in the summer (*but note*: summer hours count towards the 84 credit hour TBP limit, see details below). Students defending a dissertation must register for 3 credit hours of PHCEU 7970 during the semester they defend. The Graduate School will NOT pay for more than 11 credits in either the spring or fall semester or more than 3 credits in the summer. If the student wishes to enroll in more credits, he/she will be financially responsible for the tuition overload. Tuition support for such instances is elective and should be discussed by the student, the mentor, and the Department Chair.

When a graduate student research assistant exceeds 84 cumulative credit hours, only resident (in-state) tuition will be covered by TBP, up to the maximum period allowed by the program (5 years for Ph.D. students entering with a B.S. degree; 4 years for Ph.D. students entering with a M.S. degree; 2 years for M.S. students). For international research assistants, thesis research hours (7970) and faculty consultation (7980) are the only classes billed at the resident rate. All other courses are the financial responsibility of the research assistant. This policy becomes effective during the semester in which cumulative registration exceeds 84 credit hours as a University of Utah graduate student. Undergraduate, contract and/or audited courses count toward the required minimum 9 credit hours but do not qualify for tuition benefit. A student registered for fewer than 9 credit hours may make up the difference by registering for PHCEU 6970, 6980, 7970, 7980, or other appropriate graduate credit. Students may register for a maximum 16 semester hours but are

responsible for tuition for hours exceeding 12 credits. Students adding and/or dropping courses after each semester's published add/drop deadlines are responsible for any and all charges incurred. If registration falls below 9 credit hours at any time during the semester, a student becomes ineligible for TBP participation and will be billed the full tuition for that semester.

Important note: (from the on-line guidelines for the Graduate Tuition Benefit in the Graduate School) **"Out-of-state, non-international graduate students receiving a tuition benefit must apply for Utah residency upon fulfilling sixty (60) semester credit hours at a regionally accredited Utah institution of higher education. Credit hours for graduate-level courses 6000 and above shall be multiplied by 1.5 in calculating the required 60 semester credit hours. A student's ability to establish residency will not affect receipt of a tuition benefit."** (For complete Code on Utah residency, revised 2002, go to: <http://www.sa.utah.edu/admiss/appdownload/Resident.pdf>).

For the most current or additional TBP information, please refer to the Graduate School's website, <http://www.gradschool.utah.edu/tbp/index.php>

II. DEPARTMENT SAFETY

Safe laboratory conditions and operating procedures are the collective, continuous responsibility of all personnel working in the laboratories: it is each student's obligation to ensure their own safety during the graduate research and also that all fellow lab-mates follow safe operating procedures at all times. It is also each individual's responsibility to bring unsafe situations or practices to department attention for mitigation.

Specific University safety requirements are detailed at <http://www.ehs.utah.edu/ChemicalSafety.html> for all research workers. Students are expected to understand these obligations and their role in preserving a continuously safe laboratory work environment. Students must remain vigilant in laboratory routines to abide by these guidelines. See the attached model Safety memo (appendix) that outlines PI-specific expectations for members of their lab.

In addition to laboratory environment safety protocols and policies, each student is expected to know emergency evacuation policies, routes, meeting points and procedures in case of a natural disaster or other emergency. Faculty mentors are advised to provide research group-specific guidance to students in addition to Department and College protocols in this regard.

III. GRADUATE STUDENT ACADEMIC ENROLLMENT

A. Course Registration

The University of Utah "Class Schedule Student Handbook" is available in the lobby of the Olpin Student Union Building approximately 3 months before each semester begins. The Class Schedule also is available on-line at, <http://www.utah.edu/portal/site/uuhome/menuitem.ddac5bbd6efcaf8ab123b610c1e916b9/?vgnnextoid=1223584d6f665110VqnVCM1000001c9e619bRCRD> Registration materials are mailed to students informing them of their assigned registration dates. Registration must be completed by the assigned date or a late registration fee is charged to the student.

Continuing students are **NOT** required to register for **summer semester** unless they intend to defend their dissertation that semester or if they have to demonstrate continuous registration for

student housing, foreign student visa status, or any other reason. In such instances, the student should register for the minimum of 3 credit hours. **Students DO NOT need to register for the summer semester to maintain health insurance coverage.**

Students who have advanced to Ph.D. candidacy (i.e., passed all required comprehensive and preliminary exams) and/or completed course requirements must register for 9-11 credit hours of Pharmaceutics 7970 (Thesis Research: Ph.D.) in fall and spring semesters.

B. Program Curriculum

The objectives of the graduate curriculum are (1) to provide a strong background in modern-day, basic biomedical sciences that provide the underpinning for pharmaceutics and pharmaceutical chemistry, (2) to train students in the fundamental concepts of pharmaceutics and pharmaceutical chemistry as a discipline, and (3) to facilitate more specialized training as needed for the dissertation research. Coursework is normally completed during the first two years.

Required Coursework (32 hours)

- a. Introductory courses in pharmaceutical sciences (PHARM 7113) – 3 hours (may be waived for students with a pharmacy or pharmaceutical science degree)
- b. Classical Thermodynamics (CHEM 7050) – 2 hours (may be waived for students with a chemistry degree who have taken an advanced physical chemistry sequence)
- c. Core Pharmaceutics sequence (PHCEU 7010, 7020, 7030, 7040) – 15 hours (taught annually)
- d. Electives – at least 4 elective courses that total to a minimum of 8 semester hours
- e. Journal Club (PHCEU 7975) – 4 hours (students should enroll in four consecutive semesters starting upon matriculation).

Highly Recommended Electives

- a. Biocompatibility (PHCEU 7210)
- b. Biostatistics [FPMD 6100 (3 hr with lab) or equivalent graduate-level topical offering]
- c. Case Studies and Research Ethics (PHIL/MBIOL 7570)
- d. Ideas into Dollars: Writing Grant Proposals (BIOEN 6080)

Recommended Elective Courses for Students Specializing in the Following Research Areas:

Advanced Pharmaceutical Chemistry

PHCEU 7220 Pharmaceutical Applications of Colloid and Interfacial Science - 2 hr

PHCEU 7310 Biomembrane Transport - 2 hr

CHEM 7000 Introduction to Quantum Mechanics I - 2 hr

CHEM 7010 Introduction to Quantum Mechanics II - 2 hr

CHEM 7020 Introduction to Spectroscopy I - 2 hr

CHEM 7030 Introduction to Spectroscopy II - 2 hr

CHEM 7040 Statistical Thermodynamics - 2 hr

CHEM 7240 Physical Organic Chemistry I - 2 hr

CHEM 7250 Physical Organic Chemistry II - 2 hr

CHEM 7260 Physical Organic Chemistry III - 2 hr

FPMD 6100 Introduction to Biostatistics - 3 hr

Drug Delivery Systems

PHCEU 6020 Biomaterials - 2 hr

PHCEU 7210 Biocompatibility - 2 hr
PHCEU 7220 Pharmaceutical Applications of Colloid and Interfacial Science - 2 hr
PHCEU 7310 Biomembrane Transport - 2 hr
PHCEU 7410 Physicochemical Approach to Proteins and Nucleic Acids - 2 hr
MDCH 6550 Site-Specific Drug Targeting - 2 hr
BIOEN 6140 Fundamentals of Tissue Engineering - 2 hr
BIOEN 7110 Biopolymer Characterization - 2 hr
BIOEN 7140 Advanced Topics in Tissue Engineering - 2 hr
BIOEN 7150 Introduction to Biomimetic Engineering - 2 hr
BIOEN 7160 Physical Nature of Surfaces - 2 hr
BIOEN 7164 Polymer Surface Characterization - 3 hr
MSE 5473 Polymer Synthesis/Characterization - 3 hr
MSE 6480 Polymer Science - 3 hr
BLCHM 6400 Genetic Engineering - 2 hr
BLCHM 6410 Protein and Nucleic Acid Biochemistry - 3 hr
BLCHM 6460 Protein Chemistry - 2 hr
BLCHM 6470 Nucleic Acid Chemistry - 2 hr
FPMD 6100 Introduction to Biostatistics - 3 hr

Biotechnology

PHCEU 7410 Physicochemical Approach to Proteins and Nucleic Acids - 2 hr
MDCH 6550 Site-Specific Drug Targeting - 2 hr
MDCH 6560 Biomedical Applications of Mass Spectrometry - 2 hr
MDCH 6590 NMR in Biology, Pharmacology and Medicine - 2 hr
BIOEN 6140 Fundamentals of Tissue Engineering - 2 hr
BIOEN 6170 Biomolecular Engineering - 3 hr
BIOEN 7110 Biopolymer Characterization - 2 hr
BIOEN 7140 Advanced Topics in Tissue Engineering - 2 hr
BLCHM 6400 Genetic Engineering - 2 hr
BLCHM 6410 Protein and Nucleic Acid Biochemistry - 3 hr
BLCHM 6460 Protein Chemistry - 2 hr
BLCHM 6470 Nucleic Acid Chemistry - 2 hr
FPMD 6100 Introduction to Biostatistics - 3 hr

Pharmacokinetics and Pharmacodynamics

PHCEU 7310 Biomembrane Transport - 2 hr
PHCEU 7315 Biopharmaceutics and Pharmacokinetics - 3 hr
PHPRC 7325 Applied Clinical Pharmacokinetics - 2 hr
PHTX 6010 Pharmacodynamics and Pharmacologic Basis of Therapeutics I - 5 hr
PHTX 6040 Pharmacodynamics and Pharmacologic Basis of Therapeutics II - 3 hr
PHTX 6650 Enzymology of Xenobiotic Metabolism - 2 hr
MDCH 6550 Site-Specific Drug Targeting - 2 hr
MDCH 6560 Biomedical Applications of Mass Spectrometry - 2 hr
FPMD 6100 Introduction to Biostatistics - 3 hr

C. Petition for Prior Class Credits to Count Toward Degree

A student may petition for prior class credits to apply toward the fulfillment of required coursework. The student should write a letter to the graduate student advisor and Department Chair listing the course, the text used in the course, the number of credit hours given for the course, the grade

received and a brief description of the course content. If available, the class syllabus should be included. **The graduate student advisor and Department Chair will determine whether the course can be counted toward the degree based on the relevance of the topic to the student's training in Pharmaceutics and Pharmaceutical Chemistry, the demands of the course being commensurate with graduate course-level requirements, the course material covered being current within the past two years, and the student's performance in the course being satisfactory. Approval or denial will be determined by the graduate student advisor and Department Chair. If courses approved by the graduate student advisor and Department Chair were taken at the University of Utah as a non-matriculated graduate student before officially matriculating in the Department of Pharmaceutics, a maximum of nine credit hours may be included on the student's Program of Study form. Approved courses taken at other academic institutions cannot be listed on the Program of Study form, though the student should inform his/her supervisory committee of any courses officially waived by the Department.**

D. ACADEMIC MISCONDUCT

All students are expected to constantly maintain professional conduct consistent with academic integrity in thought and deed, in coursework and in research. Various definitions of terms for academic honesty and integrity, and for scientific misconduct are provided below. The Department has a 'zero tolerance' policy for academic misconduct. To this end, students are expected to sign an honor code statement upon matriculation (provided at new student orientation), in which they pledge to conduct their graduate studies in a manner consistent with academic integrity in thought and deed, in coursework and in research. Students should be particularly aware of the implications and consequences of plagiarism and data falsification. In some cases, these can carry criminal penalties. A student who engages in academic misconduct (See Definitions, section A.3, below) or who violates the professional and ethical standards for the profession or discipline for which the student is preparing (See Definitions section A.4, below) may be subject to academic sanctions, as defined in Definitions, Section V, below, including but not limited to a grade reduction, failing grade, suspension or dismissal from the program or the University.

1. Academic Misconduct

- a. Any person who observes or discovers academic dishonesty by a student should file a written complaint with the faculty member responsible for the pertinent academic activity within thirty (30) business days of the date of discovery of the alleged event.*
- b. A faculty member who discovers or receives a complaint of misconduct relating to an academic activity for which the faculty member is responsible shall take action under this code and impose an appropriate sanction for the misconduct.*
- c. Upon receipt of a complaint of discovery of academic dishonesty, the faculty member shall make reasonable efforts to discuss the alleged academic misconduct with the accused student no later than twenty (20) business days after receipt of the complaint, and give the student an opportunity to respond. Within ten (10) business days thereafter, the faculty member shall give the student written notice of the academic sanction, if any, to be taken and the student's right to appeal the academic sanction to the Academic Appeals Committee for the college offering the course. Such sanctions may include requiring the student to rewrite a paper(s) or retake an exam(s), a grade reduction, a failing grade for the*

exercise, or failing grade for the course. In no event shall the academic sanction imposed by the faculty member be more severe than a failing grade.

d. If the faculty member imposes the sanction of a failing grade for the course, the faculty member shall, within ten (10) business days of imposing the sanction, notify in writing, the chair of the student's home department and the senior vice president for academic affairs or senior vice president for health sciences, as appropriate, of the academic misconduct and the circumstances which the faculty member believes support the imposition of a failing grade. If the sanction imposed by the faculty member is less than a failing grade for the course, the faculty member should report the misconduct to the dean or chair of the student's home department or college.

e. A student may appeal the faculty member's imposition of an academic sanction to the Academic Appeals Committee in accordance with Section D, below.

f. If the faculty member, chair or vice president believes the student's academic dishonesty warrants an academic sanction more severe than a failing grade, he/she may refer the student to the Academic Misconduct Committee for proceedings in accordance with Section g. below, and so notify the student in writing.

DUE PROCESS

source: <http://www.regulations.utah.edu/academics/6-400.html>

When appropriate, an Academic Appeals Committee (made up of 2 faculty from the college, 1 faculty member outside the college, and 2 students) will be appointed to determine whether "a hearing would aid in the resolution of other issues or serve other desirable purposes." The Committee may then impose appropriate academic sanctions. Appeals to the Dean or VP of Academic Affairs or VP of Health Sciences may be made. "At the conclusion of the appeals process, the chair or dean shall take appropriate action to implement the final decision."

D. PROCEEDINGS BEFORE THE ACADEMIC APPEALS COMMITTEE

- 1. Written Appeal. The appeal to the Academic Appeals Committee shall set forth in writing the reasons for the appeal, shall be addressed to the Committee, and shall be delivered to the chair of the Committee, with a copy to the other party.*
- 2. Response to Appeal. The chair and/or faculty member whose decision is being appealed, or the student in the case of a faculty member's appeal, may deliver a response to the appeal to the chair of the Academic Appeals Committee, with a copy to the other party, no later than five (5) working days after receipt of the complaint and recommendation.*
- 3. Makeup of the Committees. The dean of each college shall ensure that an Academic Appeals Committee is constituted according to college procedures, subject to the following parameters.⁽⁵⁾ Two faculty members shall come from the college. The Personnel and Elections Committee of the Academic Senate shall appoint one faculty member from outside the college. The faculty members shall be appointed to the Committee for staggered three-year terms. The dean shall appoint two undergraduate student members and two graduate student members who are either from the relevant Student Advisory Committee or listed as a major within the college. Undergraduate student and graduate student members will be appointed for staggered two-year terms. No more than one faculty member and two Committee members in total may come from the same department in a multi-department*

college. The members of the Committee who shall hear the case are three faculty member and the two students from the appealing student's peer group (i.e., undergraduates or graduates). The dean shall designate one of the faculty members to serve as chair of the Committee. The Committee shall establish internal procedures consistent with the Student Code.

4. Conflicts of Interest. Upon written request of one of the parties or Committee members, the dean may excuse any member of the Committee if the dean determines that the member has a conflict of interest. The dean shall select an appropriate replacement from the excused member's group (i.e., student or faculty member).
5. Proceedings before the Committees. When a timely appeal is filed, the Committee shall meet and consider the appeal. The Committee shall determine whether the appeal presents any disputed factual issues for hearing, and may determine whether a hearing would aid in the resolution of other issues or serve other desirable purposes. If the appeal raises disputed issues of fact relevant to the academic action or the academic sanction, or if the Committee determines that a hearing is otherwise necessary or desirable, the Committee shall notify the parties ⁽⁷⁾ in writing, of the date of the hearing, the names of the Committee members, and the procedures outlined below at least fifteen (15) working days prior to the hearing.

Hearings shall be conducted according to the following procedures:

- a. Hearings shall be conducted within a reasonable time after the Committee's receipt of the written appeal.
- b. At least five (5) working days prior to the date of the hearing, the parties shall make available to each other and to the Committee a list of their witnesses and a list of the documents to be offered at the hearing. In exceptional circumstances, the Committee may allow a party to call witnesses not listed or submit additional documents at the hearing.
- c. The parties have a right to be accompanied by any person as advisor, including legal counsel, who will be permitted to attend, but not directly participate in, the proceedings.
- d. Hearings shall be closed to the public.
- e. All hearings, except Committee deliberations and voting, shall be recorded and a copy made available to any party upon request.
- f. The Committee must have a quorum present to hold a hearing. A quorum consists of three (3) members, including at least one (1) student and the faculty member from outside the college. If there is more than one hearing in a matter, or if the hearing continues over more than one session, the same three members must be present for all sessions.
- g. At the hearing, the parties shall have the right to question witnesses, to present evidence and call witnesses in their own behalf, in accordance with the Committee's established internal procedures.
- h. The Committee shall not be bound by strict rules of legal evidence or procedure and may consider any evidence it deems relevant.

recording, selection, or analysis of data; differences in opinions involving the interpretation of data; or misconduct unrelated to the research process.

Definitions as used in the University Student Code: [General Provisions and Definitions](#); or see the UU General Catalog:

- A. **"Academic action"** means the recording of a final grade (including credit/no credit and pass/fail) in a course, on a comprehensive or qualifying examination, on a culminating project, or on a dissertation or thesis. It also includes a decision by the appropriate department or college committee to place a student on academic probation, or to suspend or dismiss a student from an academic program because the student failed to meet the relevant academic standards of the discipline or program. Academic action does not include academic sanctions imposed for academic dishonesty or for specific violations of professional and ethical standards of the profession or program for which the student is preparing.
- B. **"Academic dishonesty"** includes, but is not limited to, cheating, misrepresenting one's work, inappropriately collaborating, plagiarism, and fabrication or falsification of information, as defined further below. It also includes facilitating academic dishonesty by intentionally helping or attempting to help another to commit an act of academic dishonesty.
1. **"Cheating"** involves the unauthorized possession or use of information, materials, notes, study aids, or other devices in any academic exercise, or the unauthorized communication with another person during such an exercise. Common examples of cheating include, but are not limited to, copying from another student's examination; submitting work for an in-class exam that has been prepared in advance; violating rules governing the administration of exams; having another person take an exam; altering one's work after the work has been returned and before resubmitting it; violating any rules relating to academic conduct of a course or program.
 2. **Misrepresenting one's work** includes, but is not limited to, representing material prepared by another as one's own work; submitting the same work in more than one course without prior permission of both faculty members.
 3. **"Plagiarism"** means the unacknowledged use or incorporation of any other person's work in, or as a basis for, one's own work offered for academic consideration or credit, or for public presentation. Plagiarism includes, but is not limited to, representing as one's own, without attribution, any other person's words, phrasing, ideas, sequence of ideas, information or any other mode or content of expression. It does not include honest error.
 4. **"Fabrication or falsification"** includes reporting experiments or measurements or statistical analyses never performed; manipulating or altering data or other manifestations of research to achieve a desired result; falsifying or misrepresenting background information, credentials or other academically relevant information; and selective reporting, including the deliberate suppression of conflicting or unwanted data. It does not include honest error or honest differences in interpretations or judgments of data and/or results.
- C. **"Academic misconduct"** includes academic dishonesty, violations of the professional or ethical standards for the profession or discipline for which the student is preparing or other specific misconduct that demonstrates unfitness for such profession or discipline.
- D. **"Academic sanction"** means a sanction imposed on a student for engaging in academic misconduct. It may include, but is not limited to, requiring a student to retake an exam(s) or

rewrite a paper(s), a grade reduction, a failing grade, suspension or dismissal from the program or the University. It may also include notification of the appropriate professional or licensing body of the profession or discipline for which the student is preparing.

More on Plagiarism:

Copying verbatim from some source without demarking the text is considered to be plagiarism. If copying word-for-word from a source (textbook, literature, web, thesis, etc.), short phrases should be put in quotes, followed by the source. Longer phrases (couple of sentences) should be indented, followed by the source. Copying verbatim of large sections of text from other sources is discouraged. When in doubt about plagiarism, please ask the advice of the instructor in charge of the class. Plagiarism also can occur in seminars. Sometimes a student will present data or a diagram in a seminar that is not his/her own work, and not reference where the data comes from. This is also a form of plagiarism.

Consequences of Academic Misconduct

The University Code allows some flexibility on consequences. In particular it states that sanctions may include "but [are] not limited to a grade reduction, failing grade, suspension or dismissal from the program or the University." <http://www.regulations.utah.edu/academics/6-400.html>

Regarding sanctions that can be imposed by an individual faculty member who observed misconduct in his/her course(s), the University Code states that "sanctions may include requiring the student to rewrite a paper(s), retake an exam(s), a grade reduction or a failing grade. In no event shall the academic sanction imposed by the faculty member be more severe than a failing grade." More serious sanctions (e.g., "suspension or dismissal from the program or the University") require more levels of due process: "If the faculty member, chair or vice president believes the student's academic dishonesty warrants an academic sanction more severe than a failing grade, he/she may refer the student to the Academic Misconduct Committee for proceedings in accordance with Section D, below, and so notify the student in writing."

Excerpt from University Code: <http://www.regulations.utah.edu/academics/6-400.html>
Policy 6-400

Editorially Revised: 02/03/2006

Subject: Code of Student Rights and Responsibilities ("Student Code")

IV. SEMINARS, STUDENT PRESENTATIONS AND JOURNAL CLUB

A. Seminar Attendance

The Department hosts graduate student seminars every week, except during holiday breaks. **It is mandatory that graduate students attend these seminars.**

B. Student Seminars

All graduate students are required to present three seminars prior to their Ph.D. defense. At least two of these must be presented to the Department during the regular seminar period, and attended by the Department faculty, post-doctoral fellows, and students. In general, these talks will follow a meeting presentation format, with an introduction, discussion of methods, results obtained and overall discussion for the presentation and then end with the integrative section. Students are strongly encouraged to practice the entire talk before mentors prior to the actual seminar. Research mentors are expected to assist the student in the preparation of the presentation.

Students may substitute a podium or poster presentation at a national meeting for the third seminar; alternatively, students may substitute two podium or poster presentations at a local or regional meeting for the third seminar.

C. Journal Club

Students are required to enroll in department journal club (PHCEU 7975) for four semesters following matriculation. The purpose of these journal clubs is to provide focus on special topics, enable students to stay abreast of broad areas of research and to foster critical analysis of scientific work. A faculty moderator will choose the scientific topic and assign research articles for the students to read. Each student enrolled in journal club is expected to present at least one article each semester. Presenters will summarize the scientific problem addressed by the article, experimental methods, results and interpretation. They will lead a peer critique and discussion of the relative scientific merit of the paper including strengths and weaknesses. Students will be graded (credit/no credit) based on the presentation of their assigned article and their participation in the discussion of other articles.

V. TEACHING ASSISTANTSHIPS

Graduate students in the Department of Pharmaceutics and Pharmaceutical Chemistry are required to engage in one term as a teaching assistant (TA). The expectation is that the teaching assistantship provides a valuable pedagogical leadership experience and mentoring opportunity for the graduate student. TA assignments will be selected from the department's core courses or other graduate-level courses as determined by faculty.

The TA requirement will normally be fulfilled during the student's third year.

TA obligations include:

1. Exhibiting English language proficiency to interact effectively with students in a leadership and pedagogical manner. The Graduate School requires all non-native English-speaking graduate students to be cleared by the ITA Program in advance of any teaching exposure in order to be eligible for a tuition benefit for teaching assistantships. Participation in the annual ITA training workshop is therefore a compulsory requirement for all department international students upon formal graduate program initiation.
2. Meeting with the instructor of record before the semester begins to initiate organization and expectations for roles and duties.
3. TAs should attend all lectures and be sufficiently familiar with materials covered in class and homework to be able to tutor the content.
4. TAs should contribute in a substantive way to the pedagogical needs of the course. This will be determined by the instructor and the particular nature of the course. For example, TAs would be expected to undertake one or more of the following activities: (a) deliver one or more lectures; (b) lead problem-solving or discussion sessions prior to exams; (c) exam grading.
5. TAs should plan on spending 3-4 hours/week in class and an average of 3 to 5 additional hours per week for other pedagogical activities related to the course.
6. Financial support will continue by the student's research advisor. When students TA a second time, additional support is provided by the Department.

Additional TA training is encouraged. This is offered each summer through TA training workshops sponsored by the University and the semester-long TA Scholars program run through the University Center for Teaching and Learning Excellence.

VI. STUDENT SUPERVISORY COMMITTEE

The Department faculty collectively assume mentoring responsibilities for all graduate students until their Supervisory Committee is formed in consultation with their faculty advisor. All graduate students should formally establish their Supervisory Committee once they have established a dissertation research topic, near the completion of their coursework and after completing the comprehensive exam. Until that time, faculty will provide to the student an annual review of progress in the form of a written memorandum assessing progress and concerns, placed in the student's file.

The student's Supervisory Committee, chaired by the research advisor, consists of five faculty members and forms the primary faculty contact and advisory group for each student. Of the five members, the majority must be regular faculty in the student's major department. One member of the supervisory committee must be from another department. The supervisory committee should be minimally informed if not formally convened annually about the student's progress, research strategies, technical problems and success, and coursework advancement. The supervisory committee can also be consulted in cases of student-advisor conflict, or impasse.

For conducting the student's preliminary exam, committee chair duties temporarily shift to another member of the student's supervisory committee, rather than the research advisor. The specific oral exam chairperson is specified at the time of the preliminary exam, generally by consensus of the supervisory committee.

VII. COMPREHENSIVE AND PRELIMINARY EXAMINATIONS

A. Requirements and Scheduling

All students are required to take the department's written comprehensive examination within six months of completing their department core courses. This exam will be offered twice yearly: fall and spring semesters. Students planning to take the exam should notify the department graduate studies coordinator before the end of the semester preceding the semester in which they plan to take the exam.

B. Comprehensive Exam Topics

Students will be evaluated for their written performance and demonstrated advanced proficiency on questions relating to relevant topics in the field, including:

1. Physical chemistry and physical pharmacy, including solvent theory, equilibria, thermodynamics, mass transport, colloids and surface science.
2. Physical organic and polymer chemistry, chemical kinetics and reaction mechanisms.
3. Drug delivery, including targeting, internalization and intracellular trafficking.
4. Biopharmaceutics and pharmacokinetics.

C. Comprehensive Exam Procedures

Each student will receive five questions that test the student's knowledge of the program's core curriculum. Particularly, there will be one question for each of the core Pharmaceutics core courses (PHCEU 7010, 7020, 7030 & 7040). The questions will be written and graded by the instructor(s) responsible for the classes. The fifth question will test the student's knowledge of PHARM 7113. This question will be written and graded by Department faculty members selected by the exam coordinator. Students will be required to submit their own written responses to the questions within ten days from the date of distribution. No revisions will be accepted after the ten-

day deadline. Students are expected to conform to all policies regarding academic honesty and integrity in producing their answers: essentially that all work submitted is their own with all external supporting materials and resources clearly cited in the exam answers.

D. Comprehensive Exam Grading

Faculty will have two weeks from the date the exam answers are received to grade them. Grading of each of the five questions will be on a scale of 0-100, with a score of 70 considered to be a passing score for each question. Results will be conveyed to the student in writing by the Graduate Program Advisor or to the Chair and be filed in the student's official dossier. Students may appeal the grading of a particular question. In such cases, three faculty members (other than those who wrote the question) will be selected by the preliminary exam coordinator to re-grade the question being challenged.

Students passing all written questions will receive an unconditional pass for the comprehensive exam.

Students failing to pass one or two of five written questions will receive a conditional pass for the comprehensive exam and will have one month to submit correct answer(s). The faculty will then have one month from the date that the revised answers were submitted to re-evaluate them. Failure to answer one or two questions correctly in the resubmission, or missing any deadlines, will require the student to repeat the entire comprehensive exam at the next scheduled date. The second comprehensive exam will be the final opportunity to pass this requirement.

Students failing to pass three questions will fail the comprehensive exam. These students will be required to repeat the entire comprehensive exam at the next scheduled exam date. The second comprehensive exam will be final.

Students who fail the second exam are no longer eligible to continue in the doctoral program.

E. Preliminary Exam Procedures

To advance to Ph.D. candidacy, all students must pass a preliminary examination that consists of both an original written research proposal and an oral examination. This must be completed within one year of passing the comprehensive exam. The student should consult with his or her research advisor about a suitable topic for the research proposal. The research proposal topic may be based on either (1) their own research with at least **one new** aim not proposed by their advisor, or (2) new original pharmaceutically relevant research (not previously submitted for funding) that falls within the broad categories listed above (under comprehensive exam topics).

The written proposal will be evaluated for content, significance, accuracy, technical proficiency and maturity by a preliminary exam committee comprising four faculty from the student's supervisory committee, but not the student's research advisor. The supervisory committee shall select one of these four as the chair of the preliminary exam committee at the time of the oral examination. Committee member substitutions are allowed at the discretion of the department chair.

The research proposal should be in NIH format (PHS form 398 from 2007, or newer Grants.Gov NIH submission formats) and include the following sections – abstract, table of contents, first year budget, budget for entire project period, biographical sketch, other support, resources and facilities, research plan and references. The research plan shall consist of four subsections – specific aims, background and significance, preliminary data (typically from the literature) and a detailed, scientifically credible experimental design and procedures. Students may use proposals developed for a grant writing class, but still must include one new aim not proposed by their advisor. Proposals should be written for a 3-year timeline with the student as principal investigator.

A budget considering expected personnel, equipment, services, supplies and expendables, and other necessary items for research should be included. This can be itemized or modular. The student's advisor (or other committee members) may read the written proposal and provide limited feedback. However, the student must develop the original aim (as stated above) or the original research (as stated above on his/her own).

The student must orally defend their research proposal within a year from the date that the student was informed of his/her comprehensive exam grade. In the case of a conditional comprehensive exam pass, the oral exam deadline will not be extended to one year beyond the time required to comply with the comprehensive exam conditions. Students who do not comply with the deadline will have only one chance to pass their exam. The student should arrange a mutually acceptable exam date for the oral proposal defense with their committee and distribute the written proposal to the committee members and file copy to the department office (or in Research Park) at least one week before the oral exam meeting. An announcement of the exam should be posted to the department's electronic seminar mailing list at least one week before the defense. Please contact the department's graduate coordinator about preparing this announcement.

On the day of the oral proposal defense, the student will first provide an oral technical presentation (approximately 1 hour) of the proposal. This presentation is open to the public. Following the presentation, the exam committee conducts the oral examination in a closed session with the student. Each committee member will question the student about the proposal and/or other scientific concepts and topics related to the broad categories listed above. The student's research advisor may attend the oral presentation, but is only admitted to the closed session with permission of the committee and under strict silence in an observation capacity only. Immediately after the oral examination, the committee will meet and evaluate the student's performance. Three outcomes are possible – pass, conditional pass and fail. These outcomes are described below. The student must provide the official Utah form (*Report of the Qualifying Examination for the Ph.D., Ed.D, or M.Phil. Degree and Recommendation for Admission to Candidacy*) to the committee to report the outcome of the preliminary examination (<http://www.gradschool.utah.edu/students/forms/doctoral/qualifying.pdf>). The chair of the preliminary examination committee will write a letter informing the student of the outcome. This letter will also document reasons for a conditional pass or failure. The letter will be sent within one week of the examination to the student, advisor and department chair, and be filed in the student's official dossier.

F. Preliminary Exam Possible Outcomes

1. Pass: Students who receive a pass will advance to Ph.D. candidacy. No further work will be required – the student has completed the exam in full. The committee must unanimously agree upon a pass.

2. Conditional Pass: Students judged to be deficient in certain areas of the proposal and/or the oral examination committee will receive a conditional pass and will have 3 weeks from the date of their proposal defense to correct deficiencies in the proposal and/or fulfill other requirements as stipulated by the committee. Students may solicit feedback from their committee members and advisor while revising their proposal. The revised proposal should include an introduction section that details specific changes made in the revised proposal (see PHS form 398 for detailed instructions). The revised proposal should be submitted to committee members and the department office on or before the 4-week deadline. This submission will be final (i.e., subsequent revisions will not be considered). Committee members will have 3 weeks to review the revised proposal. Un-reviewed proposals will automatically receive a pass. The final decision (pass or fail)

will be decided by a majority of the committee. In case of a split vote, the committee chair will make the final decision. In the event of failure, or if the student's 4-week deadline is missed, the student will have one more chance to retake the exam.

3. Failure: Students who fail the preliminary exam will be required to submit and defend a new research proposal. The second submission will be final. The due date of the second submission is at the discretion of the committee, but no longer than 6 months from the date of the original proposal examination date.

VIII. PREPARING FOR THE FINAL Ph.D. DEFENSE AND TIME LIMIT FOR DEGREE COMPLETION

A. Dissertation Defense Pertinent Information

Before a Ph.D. degree can be conferred, the student is required to prepare a formal written description (the thesis dissertation), present the work in a public seminar and successfully defend the work during a formal dissertation defense. The dissertation must follow the established University of Utah format. "A Handbook for Theses and Dissertations" which gives the guidelines for the dissertation is online at <http://www.gradschool.utah.edu/thesis/handbook.pdf> or is available through the office of the Thesis and Dissertation Editor located at 202 Park Building. Doctoral candidates may submit one preliminary draft to the thesis editor's office prior to the oral defense where a precursory check for style and accuracy will be performed.

Prior to scheduling the defense, the student must complete the Department's official *Defense Clearance Form* (available from the Department's graduate secretary or website) and obtain an official copy of their transcripts from the Registrar's office (students may also ask the Department's graduate secretary to obtain a copy of their transcripts from the Registrar's office). The student should then give both the completed Defense Clearance Form and a sealed copy of the official transcripts to the Department's graduate advisor for review. If the student has completed all requirements for defending their dissertation, the graduate advisor will sign the *Defense Clearance Form* and forward it to the Department chair for review and signature. As soon as both signatures are obtained (and not prior), the defense date can be arranged for a mutually agreeable date for the committee, not in conflict with usual department functions. Students should also read and be aware of the University's requirements for dissertation drafts for defenses (see p. 41 of the General Catalog), applicable to Ph.D. defenses in Pharmaceutics:

The Department requires (as per the *Defense Clearance Form*) that copies of the draft thesis be spiral bound (two-sided copying is fine), and that an additional inspection copy be filed with the graduate secretary (421 Wakara Way, Room 318) two weeks before the oral thesis exam date. Also, an announcement of the student's defense with title should be posted to the department's electronic seminar mailing list at least two weeks before the defense date. Please contact the graduate secretary about preparing this announcement.

B. Time Limit for completion of the Doctoral Degree

Graduate degree completion time includes all final sign-off processes by all University officials regarding the student oral defense and approval of their completed written dissertation. Getting this process completed in a timely matter is the student's responsibility.

Official University policy stipulates a maximum of 7 years from their first date of entry in graduate school to 100% completion of the Ph.D. degree with all sign-offs.

Pharmaceutics department policy requires that all delinquent students will be requested to perform any or all of the following actions if they have not finished their degree requirements after 7 years from their program entry date:

- * Retake the qualifying exam per normal routines
- * Orally defend their thesis again in official form
- * Re-register and pay for credits in the semester they intend to complete their degree, defend again or submit their dissertation for final consideration;
- * Be dismissed from the graduate program without receiving a degree.

This is based on the academic premise that all thesis research is dated, and therefore, that prompt timely oral disclosure and written peer-reviewed publication in the public domain is both expected and required for Ph.D. degree completion.

IX. FINAL CHECK OUT PROCEDURES

Graduating Ph.D. students are required to submit three final copies of their dissertation to the Thesis Office. To this end, they should first make all corrections mandated by their supervisory committee and give the corrected copy of the dissertation to the chair of their supervisory committee for final review. If the committee chair is satisfied with the dissertation, he/she will sign the Final Reading Approval Form (<http://www.gradschool.utah.edu/students/forms/doctoral/oral.pdf>) and forward the dissertation to the Department Chair for review. The student should allow two weeks for these reviews. Once the Final Reading Approval Form has been signed by both the chair of the supervisory committee and the Department Chair, the student then submits the dissertation and the Final Reading Approval Form to the Thesis Office for format check. Format check may take a week or more depending on the Thesis editors' work load. Please check the Thesis Office website for exact filing deadlines for graduation in a particular semester. Once the dissertation has passed format check, the student should make the three final copies on archive bond paper and submit them to the Thesis Office for dissertation release. The Marriott Library will bind these three copies for the student.

Additionally, graduates must provide to their thesis advisor, and any member of their degree committee who requests it, a copy of their final, corrected and University-accepted dissertation, although this need not be in any particular bound form. Additionally, individual faculty may have their own group policies that require additional copies to be furnished after successful thesis defense.

Students must also return all intellectual property (i.e. data, spectra, chemicals, apparatus, disks, notebooks and all other devices and equipment being utilized in the research project associated with their research at the University of Utah) to their research advisor: none of this can be taken from University property. All department keys are university property and are to be returned to the department at student completion and exit. All safety hazards and hazardous substances in the student's possession from research use must be responsibly identified and passed to the research advisor prior to exit. The student is required to complete an informational exit form from the department (including the student's forwarding address, termination dates for payroll, and other information needed for the department's annual report). This can be obtained from the Department when turning in the final bound thesis copy.

Students who fail to comply with these requirements or who fail to complete the departmental exit form, may, at the behest of their advisor or department chair, have their transcripts put on hold at the Registrar's Office and/or will not have completed their degree requirements and will not receive their degrees until all degree requirements, including proper check our procedures from the department and research group are met.

X. Index of Required Graduate Student Forms

1. Graduate School

Ph.D. Program Calendar:

http://www.gradschool.utah.edu/students/doctoral_calendar.php

Request for Supervisory Committee:

<http://www.gradschool.utah.edu/students/forms/supervisory.pdf>

Report of Qualifying Examination and Recommendation for Admissions to Candidacy:

<http://www.gradschool.utah.edu/students/forms/doctoral/qualifying.pdf>

Program of Study, Part 1:

http://www.gradschool.utah.edu/students/forms/doctoral/program_1.pdf

Program of Study, Part 2:

http://www.gradschool.utah.edu/students/forms/doctoral/program_2.pdf

Report of Final Oral Examination:

<http://www.gradschool.utah.edu/students/forms/doctoral/oral.pdf>

Petition for Consideration of Exception to Policy:

<http://www.gradschool.utah.edu/students/forms/exceptionpetition.pdf>

Request for Leave of Absence

<http://www.gradschool.utah.edu/students/forms/leave.pdf>

Request to Change Supervisory Committee Personnel

<http://www.gradschool.utah.edu/students/forms/changecommittee.pdf>

2. Departmental

Doctoral Dissertation Defense Clearance Form

<http://www.pharmacy.utah.edu/pharmaceutics/pdf/DefenseClearanceForm%20PhD.pdf>

Masters Thesis Defense Clearance Form

<http://www.pharmacy.utah.edu/pharmaceutics/pdf/DefenseClearanceForm%20MS.pdf>

3. Thesis Office

A Handbook for Theses and Dissertations

<http://www.gradschool.utah.edu/thesis/handbook.pdf>

Permission to Quote Copyrighted Material – Doctoral Dissertation

http://www.gradschool.utah.edu/thesis/forms/permission_phd.pdf

Permission to Quote Copyrighted Material – Masters Thesis

http://www.gradschool.utah.edu/thesis/forms/permission_ms.pdf

Multiple Author Release – Doctoral Dissertation

http://www.gradschool.utah.edu/thesis/forms/release_phd.pdf

Multiple Author Release – Masters Thesis

http://www.gradschool.utah.edu/thesis/forms/release_ms.pdf

Supervisory Committee Approval and Final Reading Approval – Doctoral Dissertation

http://www.gradschool.utah.edu/thesis/forms/signature_phd.pdf

Supervisory Committee Approval and Final Reading Approval – Masters Thesis

http://www.gradschool.utah.edu/thesis/forms/signature_ms.pdf

Appendices:

Department M.S. degree defense clearance form (check-sheet)
Department Ph.D. degree defense clearance form (check-sheet)
Safety memorandum example

Department of Pharmaceutics and Pharmaceutical Chemistry
M.S. Thesis Defense Clearance Form

Student Name: _____

Important – this form must be signed by both the Graduate Student Advisor and the Department Chairperson before scheduling your defense date. Also, the Chairman of your Supervisory Committee must have read and approved your dissertation before scheduling your defense date.

In scheduling your defense date, please be aware that a spiral bound copy of your dissertation must be submitted to each of your committee members and to the Department Graduate Office (421 Wakara Way, Room 318) at least two weeks before your defense. Also, the announcement of your dissertation defense must be posted to the Department’s seminar mailing list at least two weeks before your defense. The Department Office (301 SKH) can post this announcement for you if you provide a .pdf file to them in time.

PUBLICATIONS:

Please list 1 publication from your thesis research for which you are the primary author (typically first author). This publication must be submitted to, accepted by or published by a peer-reviewed journal with an SCI impact factor > 1.0.

1.

JOURNAL CLUB:

Please list the two consecutive semesters that you enrolled in departmental journal club. Also list the title of each journal club.

Journal Club No. 1	
Journal Club No. 2	

SEMINAR:

Please list the date and title of a departmental seminar that you presented. A podium or poster presentation at a scientific meeting may be substituted for a department seminar. In such case, please list the citation (Authors. Presentation Title. Meeting Name. Meeting Date.) for your podium or poster presentation.

Seminar	
OR	
Podium or Poster Presentation	

COMPREHENSIVE EXAMINATION

Please give the date that you passed your comprehensive exam:

Please request a copy of transcripts and schedule a meeting with the Department's Graduate Student Advisor to ensure all required coursework is complete.

All Departmental requirements have been met; the student is clear to proceed with thesis defense.

Graduate Student Advisor

Date

Department Chair

Date

Department of Pharmaceutics and Pharmaceutical Chemistry
Ph.D. Defense Clearance Form

Student Name: _____

Important – this form must be signed by both the Graduate Student Advisor and the Department Chairperson before scheduling your defense date. Also, the Chairman of your Supervisory Committee must have read and approved your dissertation before scheduling your defense date.

In scheduling your defense date, please be aware that a spiral bound copy of your dissertation must be submitted to each of your committee members and to the Department Graduate Office (421 Wakara Way, Room 318) at least two weeks before your defense. Also, the announcement of your dissertation defense must be posted to the Department's seminar mailing list at least two weeks before your defense. The Department Office (301 SKH) can post this announcement for you if you provide a .pdf file to them in time.

PUBLICATIONS:

Please list 2 full, original technical publications from your thesis research for which you are the primary author (typically first author). Listed publications must be submitted, accepted or published by a recognized peer-reviewed journal whose SCI impact factor is published to be > 1.00.

1.

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2.

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JOURNAL CLUB:

Please list four consecutive semesters that you enrolled in departmental journal club. Also list the title of each journal club.

Journal Club No. 1

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Journal Club No. 2

--	--

Journal Club No. 3

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Journal Club No. 4

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SEMINARS:

Please list dates of your departmental seminars. As stated in the departmental guidelines, students are required to present at least two departmental seminars and a podium or poster presentation at a national meeting. In lieu of a national presentation, students may present two podium or poster presentations at local or regional meetings. Podium or poster presentations should be listed as citations (Authors. Presentation Title. Meeting Name. Meeting Date.)

Seminar 1	
Seminar 2	
Seminar 3	
Podium or Poster Presentations	

TEACHING ASSISTANT

Please include semester, instructor and course:

--

PRELIMINARY EXAMINATION

Please give the date that you passed your comprehensive exam:

--

Please give date that you satisfied all conditions of your preliminary exam:

--

Please request a copy of transcripts and schedule a meeting with the Department's Graduate Student Advisor to ensure all required coursework is complete.

All Departmental requirements have been met; the student is clear to proceed with thesis defense.

Graduate Student Advisor

Date

Department Chair

Date

MEMORANDUM

To: All PHCEU Graduate Students
From: David W. Grainger, Ph.D., Chair
Subject: Lab and Group Safety Commitment

October 3, 2008

Remarks: Safe laboratory conditions and operating procedures are primarily the collective responsibility of all personnel working in the laboratories: it is your obligation to see that both you and your fellow lab-mates follow safe operating procedures at all times. It is also your individual responsibility to bring unsafe situations or practices to your faculty mentor and to my attention for immediate mitigation.

Specific safety requirements are detailed at <http://www.utahehs.org/index.php?tier=2&id=16> for all research workers. You are asked to remain vigilant in your routines to abide by these guidelines:

1. Laboratory benches, hoods, and aisles will be kept neat, clean, and free of obstructions. Glassware will be cleaned and returned to its proper storage area at least daily. Solvent cans will be returned to safety cabinets immediately after use, if flammable, or stored under benches out of the way if not. Common areas (balances, vacuum ovens, cell culture room) will be kept free of clutter and sharps.
2. All gas cylinders will be secured at all times, and capped when not in use.
3. Toxic chemicals will be handled with care and stored in vented cabinets or in hoods at all times.
4. All waste will be placed in appropriate containers, records of content will be maintained, and procedures for removal will be instituted regularly, so that waste does not accumulate in the labs.
5. Safety glasses will be worn at all times in the labs. Food is allowed only in designated areas.
6. Belt guards will remain in place on vacuum pumps at all times. Vacuum oil will be disposed of.
7. Worn equipment will be repaired or discarded; frayed electrical cords will be replaced when detected. Water hazards and slippery areas will be noted with signs.
8. Hazardous chemicals and radiation will be labeled, handled, and stored in a manner consistent with Utah policies.
9. You will remain vigilant to possible sources of safety problems and attempt to remedy them.

-
- I have read and understood the above, as well as safety policies at the University of Utah as described at <http://www.utahehs.org/index.php?tier=2&id=16>.
 - I understand the chemical hygiene plan, radiation and biosafety issues in the lab.
 - I am committed to maintaining a safe working environment and accept the responsibility for safe laboratory practices as mandated by the University safety policies and procedures.
 - I have also taken the required training and refresher courses as mandated under University policy.
 - I know the emergency evacuation procedures and plan for my lab area.

Sign _____ Date:

Print Name: