

**PHARMACEUTICAL SCIENCES AND PHARMACOGENOMICS
GRADUATE PROGRAM REQUIREMENTS**

NAME: _____ ADMITTED: _____

ACADEMIC ADVISOR: _____

1. BACKGROUND AND PREREQUISITES:

Students are expected to have adequate preparation in the biological and physical sciences. In most cases, adequate background preparation includes such courses as analytical geometry and calculus, physics, physical chemistry (physical pharmacy), organic chemistry, biochemistry, molecular biology, pharmacology, and biological sciences. Students who are lacking some of these courses may complete them before admission or during the first year of graduate school.

- Preparation is adequate
- Student should take the following course(s): _____

2. CORE REQUIREMENTS (No duplication of prerequisite courses):

a. All of the following

- PSPG 245A Principles of Pharmaceutical Sciences - Pharmacokinetics, 3 units (fall)
- PSPG 245B Principles of Pharmaceutical Sciences – Metabolism and Transport, 3 units (winter)
- PSPG 245C Principles of Pharmaceutical Sciences - Pharmacogenomics, 3 units (spring)
- PSPG 206 Laboratory Rotation (in PSPG faculty laboratory), 2 units maximum
Faculty mentor _____
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Faculty mentor _____

b. Two of the following

- Chemistry 241 Molecular Thermodynamics, 5 units (fall)
- Chemistry 243 Molecular Biochemistry, 5 units (spring)
- Genetics 200A Principles of Genetics, 3 units (fall)
- BMS 255 Principles of Genetics, 4 units (winter)
- BMI 206* Introduction to Bioinformatics (winter & spring, see footnote)
- BMS 260 Cell Biology, 4 units (fall)
- PIBS 245 Cell Biology, 4 units (spring)

*The BMI course is under revision. If you are interested in taking this course, please consult you faculty advisor.

(Up to 6 units of the non-PSPG Core Requirements may be taken pass/no pass. Note that a 'C' equates to a no pass grade.)

- c. Electives: A total of 8 units chosen by the student and the academic advisor. Courses should be relevant to the student's chosen path of study. Students may select courses not taken from list (b) above of required courses. Up to two units of a third rotation may be applied as elective credits.**

Some suggested courses are:

Pharm Chem 157	Bioanalytic Theory and Technique, 3 units
PSPG 271	Advanced Pharmacokinetics/Pharmacodynamics, 4 units
PSPG 272A	Advanced Drug Delivery: Nanotechnology, 2 units
PSPG 272B	Advanced Drug Delivery: Therapeutic Applications, 2 units
Pharm Chem 219B	Enzyme Mechanisms, 3 units
Pharm Chem 230A/B	Spectroscopy, 3 units each
Pharm Chem 231	Nuclear Magnetic Resonance, 3-4 units
Pharm Chem 235	Mass Spectrometry, 3-4 units
BP 202	Intro to Biophysics & Biophysical Methods, 3 units
BP 204	Macromolecular Structure & Interactions, 3 units
BP 206	Computation of Biological Molecules, 3 units
BP 297	Modeling Complex Biological Systems, 1 unit
EPI 217*	Molecular and Genetic Epidemiology I, 1 unit
EPI 219*	Molecular and Genetic Epidemiology II, 1 unit

*There are fees associated with the epidemiology courses. Those students interested in taking these courses should obtain prior approval from their PI's as they will be responsible for providing an account number for the recharge of these fees.

List elective courses taken and number of units: _____

3. OTHER REQUIREMENTS:

- PSPG 220 Research Conference in Pharmaceuticals, 1 unit (every quarter until graduation)
- PSPG 225 Faculty Research, 1 unit (first-year students only)
- PSPG 250 Research, 1-8 units (file upon joining a laboratory every quarter until graduation)
- PSPG 266 Research Planning Conference, 1 unit
(file upon joining a laboratory every quarter until graduation)

4. TOOL REQUIREMENTS:

Biostatistics Proficiency: Biostatistics 183 or equivalent (may be used to fulfill required elective credits)
Responsible Conduct in Science: BMS 214

5. DEGREE REQUIREMENTS:

Teaching Assistantship, 1 quarter Date: _____

Oral Qualifying Examination Passed Date: _____

Advancement to Candidacy (Must be done within 6 months of passing oral exam.) Date: _____

6. SIGNATURES

Academic Advisor Date

Student Date

Please return a copy of this form to the PSPG Graduate Program Office (BH-216, Box 0775) for inclusion in the student's file.