

# Pharmacology (MS)

The Department of Pharmacology offers programs leading to the Master of Science and Doctor of Philosophy degrees. Our primary objective is to prepare candidates for research and teaching careers. The first few semesters are devoted primarily to core course work designed to give the student a broad background in the fundamental theories and techniques of pharmacology. During this time, the student gains exposure to methods for the solution of research problems by working in the laboratories of various faculty members culminating in a selection of a thesis advisor. Candidacy for the Ph.D. requires, in part, demonstrated proficiency in expository writing, the satisfactory completion of course work and preliminary written and oral examinations. Emphasis is placed on giving candidates rigorous standards of scholarship and critical attitudes toward the solution of research problems. A broad range of research interests exists within the department. An active seminar program conducted by visiting scientists gives students and faculty opportunities to broaden their outlook on current scientific problems.

**Program:** [Pharmacology](#)

**Type:** MS

## First Year Fall

| Item #                   | Title  | Credits   |
|--------------------------|--|-----------|
| BIOC-101                 | General Biochemistry                               | 4         |
| PHAR-219                 | Graduate Biomedical Informatics                    | 2         |
| PHAR-204                 | Literature Seminar                                 | 1         |
| PHAR-205                 | Research Seminar                                   | 1         |
| PHAR-200                 | Introduction to General Principles of Pharmacology | 3         |
| <b>Sub-Total Credits</b> |  | <b>11</b> |

## First Year Spring

- PHAR-400 \*Note: This course can be taken for a maximum of 10 credits with the student taking 2 credits per semester.

| Item #                   | Title  | Credits   |
|--------------------------|--|-----------|
| PHSI-171                 | Basic Medical Physiology                         | 7         |
| PHAR-400                 | Research (M.S. Thesis or Ph.D. Dissertation)     | 1-2       |
| PHAR-201                 | Introduction to Pharmacological Research Methods | 3         |
| <b>Sub-Total Credits</b> |  | <b>11</b> |

## First Year Summer

- PHAR-400 \*Note: This course can be taken for a maximum of 10 credits with the student taking 2 credits per semester.

| Item #                   | Title  | Credits  |
|--------------------------|--|----------|
| PHAR-400                 | Research (M.S. Thesis or Ph.D. Dissertation) | 1-2      |
| <b>Sub-Total Credits</b> |  | <b>2</b> |

## Second Year Fall

- PHAR-400 \*Note: This course can be taken for a maximum of 10 credits with the student taking 2 credits per semester.

| Item #                   | Title  | Credits   |
|--------------------------|--|-----------|
| PHAR-216                 | General and Systematic Pharmacology I        | 4         |
| PSYC-277                 | Applied Multivariate Statistics              | 3         |
| PHAR-400                 | Research (M.S. Thesis or Ph.D. Dissertation) | 1-2       |
| PHAR-208                 | Advanced Problems in Pharmacology            | 4         |
| PHAR-220                 | Alcohol Studies                              | 2         |
| PHAR-212                 | Cellular and Biochemical Pharmacology        | 2         |
| <b>Sub-Total Credits</b> |  | <b>17</b> |

## Second Year Spring

- PHAR-400 \*Note: This course can be taken for a maximum of 10 credits with the student taking 2 credits per semester.

| Item #                   | Title  | Credits   |
|--------------------------|--|-----------|
| PHAR-217                 | General and Systematic Pharmacology II       | 4         |
| PHAR-400                 | Research (M.S. Thesis or Ph.D. Dissertation) | 1-2       |
| PHAR-252                 | Cellular and Molecular Physiology            | 3         |
| PHAR-209                 | Drug Development in Clinical Pharmacology    | 2         |
| PHAR-202                 | Experimental Design and Statistical Methods  | 4         |
| PHAR-203                 | Intro to theory and Methods in Toxicology    | 4         |
| PHAR-401                 | Thesis Writing for M.S                       | 1         |
| <b>Sub-Total Credits</b> |  | <b>19</b> |
| <b>Total credits:</b>    |  | <b>60</b> |