

# Ph.D. in Pharmaceutical Sciences

**Overview** 

**Degree Requirements** 

### **Degree Requirements**

The academic regulations for this degree program, as entered in the University of Mississippi Catalog, are in effect for the current or selected academic year and semester. The University of Mississippi reserves the right to 1) change or withdraw courses; 2) change rules for registration, instruction, and graduation; and 3) change other regulations affecting the student body at any time.

#### Ph.D. in Pharmaceutical Sciences

| REQUIREMENT              | HOURS | DESCRIPTION  |
|--------------------------|-------|--|
| Select an emphasis       |       | Student must enroll in one of the Ph. D. in Pharamecuetical Sciences emphasis areas: medicinal chemistry, pharmaceutics, pharmacognosy, environmental toxicology, pharmacy administration or pharmacology/toxicology,  |
| GPA requirements         |       | A cumulative average of not less than 3.0 (B) must be achieved in all graduate work taken.   |
| Pharmacy Dean's approval |       | This Degree Audit program is an advising tool only. The dean's office will make the final certification that the student qualifies for graduation. The dean's office will also determine if other university or school requirements (GPA, etc.) have been met. |

## Emphasis - Medicinal Chemistry

| REQUIREMENT                   | HOURS | DESCRIPTION  |
|-------------------------------|-------|--|
| <u>Medc 501</u> - C min       | 3     | Complete <u>Medc 501</u> with a grade of C or better.  |
| <u>Medc 502</u> - C min       | 3     | Complete Medc 502 with a grade of C or better.   |
| <u>Medc 541</u> or <u>542</u> | 2     | Complete at least one of the following courses with a grade of C or better: Medc 541 or Medc 542.  |
| <u>Medc 797</u>               | 18    | Student must complete at least 18 hours of dissertation credits (Medc 797).  |
| 6 hrs chemistry 500+          | 6     | Complete at least 6 semester hours of chemistry courses at 500/600 level. Each course must be approved by the student's GPC/Chair and completed with a grade of C or better.   |
| Cumulative exams              |       | Student must pass five examinations from at least four different department faculty members. He/she is required to pass a minimum of two of the first 12 exams administered.   |
| DAD courses                   | 12    | Student must complete at four out of seven of the Drug Action and Design (DAD) courses (Medc 609, 611, 612, 613, 614, 618, or 620). Each course must be completed with a grade of C or better.   |
| Elective courses              | 6     | Complete at least 6 hours of graduate-level elective courses. Courses must be approved by the student's GPC/Chair.   |
| Medc Seminar                  | 2     | Complete at least 2 semester hours of Medc seminar courses ( <u>Medc 543</u> and/or <u>Medc 544</u> ) with a grade of C or better in each.   |
| Oral defense                  |       | Every candidate for the Ph.D. degree must successfully pass a final oral examination (defense of dissertation) administered by the student's dissertation committee and scheduled by the Graduate School.  |
| Research proposal             |       | Student must prepare, submit, and successfully (orally) defend an original research proposal (ORP).  |
| Submit Dissertation           |       | Student must submit a dissertation to his/her GPC/Chair. The dissertation must conform to the regulations governing style set forth in "A Manual of Thesis and Dissertations Preparations", available in the Graduate School Office. Two copies of the dissertation must be presented to the Graduate School after the final examination for the doctorate has been accepted and before the beginning of the regular examination period for the semester in which the candidate plans to graduate. |

| REQUIREMENT             | HOURS | DESCRIPTION   |
|-------------------------|-------|---|
| Phad 543/544            |       | In addition to the course requirements, student must register for departmental seminar (Phad 543/544) each semester (1 credit hour per semester). |
| <u>Phad 579</u> - C min | 3     | Complete Phad 579 with a grade of C or better.  |
| <u>Phad 674</u> - C min | 2     | Complete Phad 674 with a grade of C or better.  |
| <u>Phad 680</u> - C min | 3     | Complete Phad 680 with a grade of C or better.  |
| <u>Phad 681</u> - C min | 3     | Complete Phad 681 with a grade of C or better.  |
| <u>Phad 683</u> - C min | 3     | Complete Phad 683 with a grade of C or better.  |





| REQUIREMENT                | HOURS | DESCRIPTION  |
|----------------------------|-------|--|
| <u>Phad 687</u> - C min    | 3     | Complete Phad 687 with a grade of C or better.   |
| Phad 688 - C min           | 3     | Complete Phad 688 with a grade of C or better.   |
| Phad 689 - C min           | 3     | Complete Phad 689 with a grade of C or better.   |
| Phad 692 - C min           | 3     | Complete Phad 692 with a grade of C or better.   |
| Phad 693 - C min           | 3     | Complete Phad 693 with a grade of C or better.   |
| <u>Phad 694</u> - C min    | 3     | Complete <u>Phad 694</u> with a grade of C or better.  |
| Phad 797                   | 18    | Complete at least 18 hours of dissertation credit (Phad 797).  |
| Comprehensive exam         |       | Student must pass a comprehensive examination.   |
| Dissertation prospectus    |       | Student must submit and defend a dissertation prospectus.  |
| Oral defense               |       | Every candidate for the Ph.D. degree must successfully pass a final oral examination (defense of dissertation) administered by the student's dissertation committee and scheduled by the Graduate School.  |
| Submit Dissertation        |       | Student must submit a dissertation to his/her GPC/Chair. The dissertation must conform to the regulations governing style set forth in "A Manual of Thesis and Dissertations Preparations", available in the Graduate School Office. Two copies of the dissertation must be presented to the Graduate School after the final examination for the doctorate has been accepted and before the beginning of the regular examination period for the semester in which the candidate plans to graduate. |
| Specialization             | 12    | Stuent must complete at least 12 hours in one of the Pharmacy Administration emphasis areas: Management or Marketing. Courses must be approved by the student's GPC/Chair.   |
| Phad 698                   | 6     | Complete at least 6 hours of nonthesis research (Phad 698).  |
| Pharmacy admin orientation |       | In addition to the course requirements, each student must participate and complete an orientation to the discipline of pharmacy administration.  |

### **Emphasis - Pharmaceutics**

| REQUIREMENT             | HOURS | DESCRIPTION  |
|-------------------------|-------|--|
| <u>Phar 535</u> - C min | 3     | Complete Phar 535 with a grade of C or better.   |
| <u>Phar 543</u> - C min | 1     | Complete Phar 543 with a grade of C or better.   |
| <u>Phar 544</u> - C min | 1     | Complete Phar 544 with a grade of C or better.   |
| <u>Phar 641</u> - C min | 4     | Complete Phar 641 with a grade of C or better.   |
| <u>Phar 642</u> - C min | 3     | Complete Phar 642 with a grade of C or better.   |
| <u>Phar 644</u> - C min | 3     | Complete Phar 644 with a grade of C or better.   |
| <u>Phar 649</u> - C min | 3     | Complete Phar 649 with a grade of C or better.   |
| <u>Phar 650</u> - C min | 2     | Complete Phar 650 with a grade of C or better.   |
| <u>Phar 660</u> - C min | 3     | Complete Phar 660 with a grade of C or better.   |
| Phar 797                | 18    | Complete at least 18 hours of dissertation credits (Phar 797).   |
| Comprehensive exam      |       | Student must pass a comprehensive examination.   |
| Dissertation prospectus |       | Student must prepare and orally defend a dissertation prospectus before his/her dissertation committee.  |
| Oral defense            |       | Every candidate for the Ph.D. degree must successfully pass a final oral examination (defense of dissertation) administered by the student's dissertation committee and scheduled by the Graduate School.  |
| Statistics              | 4     | Student must complete one of the following statistics and experimental design courses with a grade of C or better: <u>Bisc 504</u> or <u>Math 597</u> .  |
| Submit Dissertation     |       | Student must submit a dissertation to his/her GPC/Chair. The dissertation must conform to the regulations governing style set forth in "A Manual of Thesis and Dissertations Preparations", available in the Graduate School Office. Two copies of the dissertation must be presented to the Graduate School after the final examination for the doctorate has been accepted and before the beginning of the regular examination period for the semester in which the candidate plans to graduate. |
| Surface Phenomena       | 3     | Complete at least one of the following courses with a grade of C or better: <u>Phar 645</u> or <u>Ch E 545</u> .   |





## **Emphasis - Pharmacognosy**

| REQUIREMENT             | HOURS | DESCRIPTION  |
|-------------------------|-------|--|
| <u>Phcg 543</u> - C min | 1     | Complete Phcg 543 with a grade of C or better.   |
| <u>Phcg 544</u> - C min | 1     | Complete Phcg 544 with a grade of C or better.   |
| <u>Phcg 620</u> - C min | 3     | Complete Phcg 620 with a grade of C or better.   |
| <u>Phcg 627</u> - C min | 3     | Complete Phcg 627 with a grade of C or better.   |
| Phcg 628 - C min        | 3     | Complete Phcg 628 with a grade of C or better.   |
| Phcg 643                | 1     | Complete Phcg 643.   |
| Phcg 644                | 1     | Complete Phcg 644.   |
| Phcg 797                | 18    | Complete at least 18 hours of dissertation credits (Phcg 797).   |
| Comprehensive exam      |       | Student must pass a comprehensive examination.   |
| Elective courses        | 4     | Student must take at least four additional 500/600 level courses, at least htree of which are from outside the department from the fields of pharmacology, biochemistry, medicinal chemistry, organic chemistry, botany, microbiology, marine biology, or other approved electives.  |
| Oral defense            |       | Every candidate for the Ph.D. degree must successfully pass a final oral examination (defense of dissertation) administered by the student's dissertation committee and scheduled by the Graduate School.  |
| Research proposal       |       | Student must submit and orally defend an original research proposal.   |
| Submit Dissertation     |       | Student must submit a dissertation to his/her GPC/Chair. The dissertation must conform to the regulations governing style set forth in "A Manual of Thesis and Dissertations Preparations", available in the Graduate School Office. Two copies of the dissertation must be presented to the Graduate School after the final examination for the doctorate has been accepted and before the beginning of the regular examination period for the semester in which the candidate plans to graduate. |

### **Emphasis - Pharmacology**

| <u>emphasis - Pharm</u> | acology | ·   |
|-------------------------|---------|---|
| REQUIREMENT             | HOURS   | DESCRIPTION   |
| <u>Phcl 501</u> - C min | 1       | Complete Phcl 501 with a grade of C or better.  |
| Phcl 563 - C min        | 4       | Complete Phcl 563 with a grade of C or better.  |
| Phcl 564 - C min        | 4       | Complete Phcl 564 with a grade of C or better.  |
| Phcl 611                | 1       | Complete Phcl 611.  |
| Phcl 612                | 1       | Complete Phcl 612.  |
| Phcl 643                | 1       | Complete Phcl 643.  |
| Phcl 651 - C min        | 1       | Complete Phcl 651 with a grade of C or better.  |
| Phcl 661 - C min        | 4       | Complete <u>Phcl 661</u> with a grade of C or better.   |
| Phcl 669 - C min        | 4       | Complete <u>Phcl 669</u> with a grade of C or better.   |
| Phcl 675 - C min        | 4       | Complete <u>Phcl 675</u> with a grade of C or better.   |
| Phcl 676 - C min        | 4       | Complete Phcl 676 with a grade of C or better.  |
| Phcl 797                | 18      | Complete at least 18 hours of dissertation (Phcl 797).  |
| <u>Psy 603</u> - C min  | 3       | Complete Psy 603 with a grade of C or better.   |
| Comprehensive exam      |         | Student must pass both an written and oral comprehensive examination.   |
| Manuscript              |         | Student must submit a manuscript that describes the dissertation research and is suitable for publication in a refereed journal.  |
| Oral defense            |         | Every candidate for the Ph.D. degree must successfully pass a final oral examination (defense of dissertation) administered by the student's dissertation committee and scheduled by the Graduate School. |





| REQUIREMENT              | HOURS  | DESCRIPTION  |
|--------------------------|--------|--|
| Submit Dissertation      |        | Student must submit a dissertation to his/her GPC/Chair. The dissertation must conform to the regulations governing style set forth in "A Manual of Thesis and Dissertations Preparations", available in the Graduate School Office. Two copies of the dissertation must be presented to the Graduate School after the final examination for the doctorate has been accepted and before the beginning of the regular examination period for the semester in which the candidate plans to graduate. |
| <b>Emphasis - Enviro</b> | nmenta | <u>Toxicology</u>  |
| REQUIREMENT              | HOURS  | DESCRIPTION  |
| <u>Bisc 504</u> - C min  | 4      | Complete Bisc 504 with a grade of C or better.   |
| <u>Phcl 547</u> - C min  | 2      | Complete Phcl 547 with a grade of C or better.   |
| <u>Phcl 643</u> - C min  | 4      | Student must present a minimum of four seminars ( <u>Phcl 643</u> ); one of these presentations can be the student's dissertation research.  |
| <u>Phcl 675</u> - C min  | 4      | Complete Phcl 675 with a grade of C or better.   |
| <u>Phcl 676</u> - C min  | 4      | Complete Phcl 676 with a grade of C or better.   |
| Phcl 797                 | 18     | Complete at least 18 hours of dissertation credits.  |
| Comprehensive exam       |        | Student must pass a comprehensive examination.   |
| Dissertation prospectus  |        | Student must submit and defend a dissertation prospectus.  |
| Oral defense             |        | Every candidate for the Ph.D. degree must successfully pass a final oral examination (defense of dissertation) administered by the student's dissertation committee and scheduled by the Graduate School.  |
| Submit Dissertation      |        | Student must submit a dissertation to his/her GPC/Chair. The dissertation must conform to the regulations governing style set forth in "A Manual of Thesis and Dissertations Preparations", available in the Graduate School Office. Two copies of the dissertation must be presented to the Graduate School after the final examination for the doctorate has been accepted and before the beginning of the regular examination period for the semester in which the candidate plans to graduate. |

