

# PHARMACY, DOCTORATE

The University Core Curriculum is the same across all undergraduate bachelor's programs. Please consult the academic advisor for your designated major before selecting courses in this area.

## Summary

| Code                                     | Title | Hours      |
|--|-------|------------|
| General Education Core Curriculum (p. 1) |       | 43         |
| Major Requirements (p. 1)                |       | 146        |
| Other Requirements (p. 2)                |       | 38         |
| <b>Total Hours</b>                       |       | <b>227</b> |

## General Education Core Curriculum (Standard)<sup>1</sup>

| Code  | Title                        | Hours     |
|---|------------------------------|-----------|
| <b>Communication</b>                        |                              |           |
| ENGL 1301                                   | Freshman English I           | 3         |
| ENGL 1302                                   | Freshman English II          | 3         |
| <b>Mathematics</b>                          |                              |           |
| MATH 2312                                   | Precalculus Math             | 3         |
| <b>Life and Physical Sciences</b>           |                              |           |
| CHEM 1311                                   | Chemistry I                  | 3         |
| CHEM 1312                                   | Chemistry II                 | 3         |
| <b>Language, Philosophy, and Culture</b>    |                              |           |
| ENG 2XX <sup>4</sup>                        |                              | 3         |
| <b>Creative Arts</b>                        |                              |           |
| Visual and Performing Arts <sup>5</sup>     |                              | 3         |
| <b>American History</b>                     |                              |           |
| HIST 1301                                   | Soc & Pol Hist US to 1877    | 3         |
| HIST 1302                                   | Soc & Pol Hist US Since 1877 | 3         |
| <b>Government/Political Science</b>         |                              |           |
| POLS 2305                                   | American Government          | 3         |
| POLS 2306                                   | Texas Government             | 3         |
| <b>Social and Behavioral Sciences</b>       |                              |           |
| Social and Behavioral Sciences <sup>6</sup> |                              | 3         |
| <b>Institutional Options</b>                |                              |           |
| COMM 1321                                   | Business & Professional Comm | 3         |
| or COMM 1315                                | Public Address               |           |
| PHYS 1301                                   | College Physics I            | 3         |
| <b>Total Hours</b>                          |                              | <b>42</b> |

<sup>1</sup>

Students should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed.

<sup>2</sup>

(N) represents the number of course credits.

<sup>3</sup>

Four (4) hours will be accepted for transfer students. Students may still be required to complete their institutions required math sequence to qualify for Calculus if they do not qualify for the course upon admission. TSU Math Sequence: MATH 1314 College Algebra, and/or MATH 2312 Precalculus Math must be completed if student does not meet SAT/ACT or TSI Math scores to qualify for MATH 2413 Calculus & Analytic Geometry I in their first semester (See advisor).

<sup>4</sup>

ENGL 2332 World Literature I, ENGL 2333 World Literature II, ENGL 2326 American Literature, ENGL 2328 African-American Literature

<sup>5</sup>

Select from the following courses: THEA 1310 Introduction to Theatre, MUSI 1306 Music Appreciation, MUSI 1315 Fine Arts In Daily Living, ARTS 1315 Intro African Art (TCCN: DRAM 1310, MUSI 1306, HUMA 1315, HUMA 2323, ARTS 1301).

<sup>6</sup>

Select from the following courses: PSYC 2301 General Psychology, ECON 2301 Principles Of Economics I, ECON 2302 Principles Of Economics II, SOCI 1301 Introduction To Sociology, SOCI 1306 Contemporary Social Issues, SOCI 2306 Soc Of Human Sexuality and SOCI 2346 Introduction To Anthropology.

## Major (Pharmacy)

| Code       | Title  | Hours |
|------------|--|-------|
| PHAR 421   | Pharmacy Practice I                              | 3     |
| & PHAR 411 | and Pharmacy Practice I Laboratory               |       |
| PHAR 433   | Pharmaceutics I Calculations                     | 4     |
| & PHAR 413 | and Pharmaceutics I Lab                          |       |
| PHCH 441   |  | 4     |
| PADM 423   | Ethics in Healthcare                             | 2     |
| PHAR 401   | Patient Assessment Laboratory                    | 1     |
| PHAR 426   | Pathophysiology                                  | 2     |
| PHAR 404   | Public Health I                                  | 1     |
| PHAR 422   | Pharmacy Practice II                             | 3     |
| & PHAR 412 | and Pharmacy Practice II Lab                     |       |
| PHAR 434   | Pharmaceutics II Dosage Forms                    | 4     |
| & PHAR 414 | and Pharmaceutics II Lab                         |       |
| PHAR 442   | Evidence-based Practice and Biostatistics        | 4     |
| PHCH 410   | Introduction to Medicinal Chemistry              | 1     |
| PHAR 428   | Pharmacology                                     | 2     |
| PHAR 405   | Public Health II : Immunizations                 | 1     |
| PHAR 530   | Principles of Drug Action I                      | 3     |
| PHAR 504   | Pharmacotherapy IA : Nervous System Disorders    | 4     |
| PHAR 501   | Pharmacotherapy IB : Renal Disorders             | 1     |
| PHAR 520   | Integrated Laboratory I                          | 2     |
| PADM 515   | Professional Development Seminar I               | 1     |
| PHAR 539   | Pharm III Pharmacokinetics                       | 4     |
| & PHAR 519 | and Pharm III Pharmacokinetics Lab               |       |
| PHAR 526   | IPPE I - Community I                             | 2     |
| PHAR 541   | Principles of Drug Action II                     | 4     |
| PHAR 503   | Pharmacotherapy IIA : Endocrine System Disorders | 3     |
| PHAR 505   | Pharmacotherapy IIB : Cardiovascular Disorders   | 3     |
| PHAR 529   | Integrated Laboratory II                         | 2     |

|  |   |            |
|--|---|------------|
| PHAR 523                               | Pharmacy Practice III : Complemetary and Alternative Medicines  | 2          |
| PHAR 527                               | IPPE - Community II   | 1          |
| Elective                               |   | 2          |
| PHAR 648                               | Principles of Drug Action III                                   | 4          |
| PHAR 637                               | Pharmacotherapy IIIA : Infectious Diseases and Immune Disorders | 4          |
| PHAR 620                               | Integrated Laboratory III                                       | 2          |
| PADM 615                               | Professional Development Seminar II                             | 1          |
| PHAR 617                               | Medication Therapy Management                                   | 1          |
| Elective                               |   | 2          |
| PHAR 627                               | IPPE III - Healthcare Systems                                   | 2          |
| PHAR 649                               | Principles of Drug Action IV                                    | 2          |
| PHAR 638                               | Pharmacotherapy IIIB: Respiratory System Disorders              | 2          |
| PHAR 639                               | Pharmacotherapy IV: Gastrointestinal System Disorders           | 3          |
| PHAR 621                               | Integrated Laboratory IV  | 1          |
| PADM 621                               | Economic Clinical Humanistic Outcomes                           | 2          |
| PADM 630                               | Pharmacy Practice Management                                    | 3          |
| PADM 634                               | Pharmacy Jurisprudence  | 3          |
| PHAR 628                               | IPPE IV - Healthcare Systems                                    | 1          |
| Advanced Pharmacy Practice Experiences |   | 42         |
| PHAR 716                               | Research Seminar I  | 1          |
| PHAR 717                               | Research Seminar II   | 1          |
| PHAR 718                               | Research Seminar III  | 3          |
| <b>Total Hours</b>                     |   | <b>146</b> |

## Other Requirements

| Code                | Title                                   | Hours |
|---------------------|---|-------|
| BIOL 111            | Biological Science Lab I                | 1     |
| BIOL 112            | Biological Science Lab II               | 1     |
| BIOL 1306           | Biological Science I                    | 3     |
| BIOL 1307           | Biological Science II                   | 3     |
| BIOL 245            | Human Anatomy & Physiology              | 4     |
| BIOL 347            | Microbiology                            | 4     |
| CHEM 211 & CHEM 231 | Organic Chem I Lab and Organic Chem I   | 4     |
| CHEM 212 & CHEM 232 | Organic Chem II Lab and Organic Chem II | 4     |
| MATH 1342           | Elementary Statistics                   | 3     |
| PHYS 213            | College Phys Lab I                      | 1     |
| PHYS 1301           | College Physics I                       | 3     |
| CHEM 111            | Chemistry I Lab                         | 1     |
| CHEM 112            | Chemistry II Lab                        | 1     |
| FS 102              | Freshman Seminar/ first Year Experience | 1     |

### Professional Electives

|                            |  |   |
|----------------------------|--|---|
| Select 4 of the following: |  | 4 |
| PADM 428                   | Spanish for Pharmacy Prof <sup>1</sup> |   |
| PHAR 429                   | Emergency Preparedness <sup>1</sup>    |   |
| HSOA 332                   | Intro Commun & Population Hlth         | 3 |

|                    |                                |           |
|--------------------|--------------------------------|-----------|
| HSOA 434           | Legal & Ethic Aspects Hlthcare | 3         |
| <b>Total Hours</b> |                                | <b>44</b> |

<sup>1</sup>

Elective courses. All students must complete at least four (4) semester credit hours of electives in the professional curriculum.

Transfer students should contact pharmacy admissions office to request approved substitute course(s).

Recommended pre-pharmacy elective courses that are not requirements of the degree plan include: PHAR 111 Pharmacy Orientation, PHAR 112 Pharmacy Orientation, PHAR 211 Pharmacy Applications, PHAR 212 Medical Terminology.

## Pharmacy, Doctorate

| Course                             | Title                                   | Hours |
|------------------------------------|---|-------|
| <b>Freshman</b>                    |   |       |
| <b>First Semester</b>              |   |       |
| BIOL 111                           | Biological Science Lab I                | 1     |
| BIOL 1306                          | Biological Science I                    | 3     |
| CHEM 111                           | Chemistry I Lab                         | 1     |
| CHEM 1311                          | Chemistry I                             | 3     |
| COSC 1301                          | Intro To Compr Science I                | 3     |
| ENGL 1301                          | Freshman English I                      | 3     |
| FS 102                             | Freshman Seminar/ first Year Experience | 1     |
| Pre-pharmacy Elective <sup>1</sup> |   |       |

**Hours** **15**

### Second Semester

|                                    |                               |   |
|------------------------------------|-------------------------------|---|
| BIOL 112                           | Biological Science Lab II     | 1 |
| BIOL 1307                          | Biological Science II         | 3 |
| CHEM 112                           | Chemistry II Lab              | 1 |
| CHEM 1312                          | Chemistry II                  | 3 |
| ENGL 1302                          | Freshman English II           | 3 |
| HIST 1301                          | Soc & Pol Hist US to 1877     | 3 |
| MATH 2413                          | Calculus & Analytic Geomtry I | 4 |
| Pre-pharmacy Elective <sup>1</sup> |                               |   |

**Hours** **18**

### Summer

#### Required Summer Semester<sup>1</sup>

|                       |                              |   |
|-----------------------|------------------------------|---|
| <b>First Semester</b> |                              |   |
| HIST 1302             | Soc & Pol Hist US Since 1877 | 3 |
| POLS 2306             | Texas Government             | 3 |

#### Second Semester

|                                       |                     |   |
|---------------------------------------|---------------------|---|
| POLS 2305                             | American Government | 3 |
| Visual & Performing Arts <sup>3</sup> |                     | 3 |

**Hours** **12**

### Sophomore

#### Third Semester

|           |                            |   |
|-----------|----------------------------|---|
| BIOL 245  | Human Anatomy & Physiology | 4 |
| CHEM 211  | Organic Chem I Lab         | 1 |
| CHEM 231  | Organic Chem I             | 3 |
| PHYS 1301 | College Physics I          | 3 |
| PHYS 213  | College Phys Lab I         | 1 |
| MATH 1342 | Elementary Statistics      | 3 |

## Social and Behavioral Sciences

|  |           |
|--|-----------|
| Select one of the following:           | 3         |
| PSYC 2301 General Psychology           |           |
| ECON 2301 Principles Of Economics I    |           |
| SOCI 1301 Introduction To Sociology    |           |
| SOCI 1306 Contemporary Social Issues   |           |
| SOCI 2306 Soc Of Human Sexuality       |           |
| SOCI 2346 Introduction To Anthropology |           |
| <b>Hours</b>                           | <b>18</b> |

## Fourth Semester

|  |           |
|--|-----------|
| CHEM 212 Organic Chem II Lab   | 1         |
| CHEM 232 Organic Chem II   | 3         |
| English 200 Level Literature   | 3         |
| COMM 1321 Business & Professional Comm<br>or COMM 1315 or Public Address | 3         |
| BIOL 347 Microbiology  | 4         |
| Pre-pharmacy elective <sup>1</sup>                                       |           |
| <b>Hours</b>   | <b>14</b> |
| <b>Total Hours</b>   | <b>77</b> |

1

Recommended pre-pharmacy elective courses that are not requirements of the degree plan include: PHAR 111 Pharmacy Orientation, PHAR 112 Pharmacy Orientation, PHAR 211 Pharmacy Applications, PHAR 212 Medical Terminology.

2

A summer term is required to complete the Pharm.D. Curriculum.

MATH 2413 Calculus & Analytic Geometry I:

4 hours will be accepted for transfer students. Students may still be required to complete their institution's required math sequence to qualify for Calculus if they do not qualify for the course upon admission. TSU Math

Sequence: MATH 1314 College Algebra and/or MATH 2312 Precalculus

Math must be completed if student does not meet SAT/ACT or TSI Math scores to qualify for MATH 2413 Calculus & Analytic Geometry I in their first semester (See advisor).

3

A summer term is required to complete the pre-pharmacy curriculum in two years.

4

Visual and Performing Arts: THEA 1310 Introduction to Theatre, MUSI 1306 Music Appreciation, MUSI 1315 Fine Arts In Daily Living, ARTS 1315 Intro African Art.