

PHARMACOLOGY AND TOXICOLOGY, B.S.

FOUR-YEAR PLAN

A minimum of 120 credits is required to earn the BS in Pharmacology and Toxicology. Below are sample four-year plans for the Pharmacology and Toxicology major, incorporating both prerequisites and major coursework. They focus on science coursework sequencing and do not take into account factors such as AP or advance standing credits, additional summer courses, study abroad, or preparing for standardized tests like the MCAT or PCAT.

It is **critical** that you talk with your advisor about your tentative plan for course sequences and prerequisites, which courses are offered fall vs. spring vs. summer, etc.

EXAMPLE PLAN: CHEM 103/104

Freshman

| Fall | Credits | Spring | Credits |
|-----------------|---------|----------------|---------|
| CHEM 103 | 4 | CHEM 104 | 5 |
| MATH 221 | 5 | STAT 371 | 3 |
| Communication A | 3 | Social Science | 3-4 |
| Electives | 3-4 | Electives | 3-4 |
| 15-16 | | 14-16 | |

Sophomore

| Fall | Credits | Spring | Credits |
|---|---------|--|---------|
| CHEM 343 | 3 | CHEM 345 | 3 |
| ZOOLOGY/BIOLOGY/ BOTANY 151 (or Biocore) | 5 | CHEM 344 | 2 |
| Ethnic Studies | 3-4 | ZOOLOGY/BIOLOGY/ BOTANY 152 (or Biocore) | 5 |
| Electives | 3 | Humanities | 3-4 |
| 14-15 | | 13-14 | |

Junior

| Fall | Credits | Spring | Credits |
|------------------------------|---------|---|---------|
| BIOCHEM 507 | 3 | BIOCHEM 508 | 3 |
| ANAT&PHY 335 (or Biocore) | 5 | PATH 404 | 3 |
| PHM SCI 558 | 2 | PHM SCI 679 | 1 |
| Humanities | 3 | PHYSICS 103 | 4 |
| Research (699) credits | 2-3 | Electives in the Major or add'l research credits | 2-3 |
| 15-16 | | 13-14 | |

Senior

| Fall | Credits | Spring | Credits |
|--|---------|--|---------|
| PHM SCI/PHM COL- M 521 | 3 | PHM SCI/PHM COL- M 522 | 3 |
| PHM SCI/M&ENVTOX/ ONCOLOGY/PHM COL- M/POP HLTH 625 | 3 | PHM SCI/M&ENVTOX/ PATH/PHM COL-M/ POP HLTH 626 | 3 |
| PHM SCI 623 ¹ | 3 | PHM SCI 679 | 1 |

| | | | |
|---|-----|---|---|
| PHYSICS 104 | 4 | GENETICS 466 (not req. if Biocore taken) | 3 |
| Electives in the Major or add'l research credits | 2-3 | Electives | 3 |
| 15-16 | | 13 | |

Total Credits 112-120

1

PHM COL-M/PHM SCI 521 Pharmacology I and PHM SCI 623 Pharmacology III are taken concurrently/in the same semester; PharmTox students can take PHM SCI 623 Pharmacology III before taking PHM COL-M/PHM SCI 522 Pharmacology II.

EXAMPLE PLAN: CHEM 109; BIOLOGY IN FIRST YEAR

Freshman

| Fall | Credits | Spring | Credits |
|-----------------|---------|--------------------------------|---------|
| CHEM 109 | 5 | CHEM 343 | 3 |
| MATH 221 | 5 | ZOOLOGY/BIOLOGY/ BOTANY 151 | 5 |
| Communication A | 3 | Social Science | 3-4 |
| Electives | 3-4 | Electives | 3-4 |
| 16-17 | | 14-16 | |

Sophomore

| Fall | Credits | Spring | Credits |
|--------------------------------|---------|--------------------|---------|
| ZOOLOGY/BIOLOGY/ BOTANY 152 | 5 | CHEM 344 | 2 |
| CHEM 345 | 3 | PHYSICS 103 or 207 | 4-5 |
| Ethnic Studies | 3-4 | STAT 371 | 3 |
| Humanities | 3-4 | Humanities | 3-4 |
| | | Electives | 2-3 |
| 14-16 | | 14-17 | |

Junior

| Fall | Credits | Spring | Credits |
|------------------------|---------|---|---------|
| BIOCHEM 507 | 3 | BIOCHEM 508 | 3 |
| PHM SCI 558 | 2 | PATH 404 | 3 |
| ANAT&PHY 335 | 5 | PHM SCI 679 | 1 |
| Research (699) credits | 2 | PHYSICS 104 or 208 | 4-5 |
| Electives | 3 | Electives in the Major or add'l research credits | 2-3 |
| 15 | | 13-15 | |

Senior

| Fall | Credits | Spring | Credits |
|--|---------|--|---------|
| PHM SCI/PHM COL- M 521 | 3 | PHM SCI/PHM COL- M 522 | 3 |
| PHM SCI/M&ENVTOX/ ONCOLOGY/PHM COL- M/POP HLTH 625 | 3 | PHM SCI/M&ENVTOX/ PATH/PHM COL-M/ POP HLTH 626 | 3 |
| PHM SCI 623 ¹ | 3 | PHM SCI 679 | 1 |
| Electives in the Major or add'l research credits | 2-3 | GENETICS 466 | 3 |
| Electives | 3 | Electives | 3-4 |
| 14-15 | | 13-14 | |

Total Credits 113-125

1

PHM COL-M/PHM SCI 521 Pharmacology I and PHM SCI 623 Pharmacology III are taken concurrently/in the same semester; PharmTox students can take PHM SCI 623 Pharmacology III before taking PHM COL-M/PHM SCI 522 Pharmacology II.

EXAMPLE PLAN: CHEM 103 SPRING OF FIRST YEAR

Freshman

| Fall | Credits | Spring | Credits |
|----------------------------|---------|-----------------|---------|
| MATH 112, 113, 114, or 171 | 3-5 | CHEM 103 | 4 |
| Social Science | 3-4 | MATH 221 or 217 | 5 |
| Communication A | 3 | Humanities | 3-4 |
| Electives | 3-4 | Electives | 3-4 |
| 12-16 | | 15-17 | |

Sophomore

| Fall | Credits | Spring | Credits | Summer | Credits |
|------------------------------------|---------|------------------------------------|---------|----------|---------|
| CHEM 104 | 5 | CHEM 343 | 3 | CHEM 345 | 3 |
| ZOOLOGY/ BIOLOGY/ BOTANY 151 | 5 | ZOOLOGY/ BIOLOGY/ BOTANY 152 | 5 | CHEM 344 | 2 |
| Ethnic Studies | 3-4 | Humanities | 3-4 | | |
| Electives | 3 | Electives in the Major | 3 | | |
| 16-17 | | 14-15 | | 5 | |

Junior

| Fall | Credits | Spring | Credits |
|--------------|---------|------------------------|---------|
| BIOCHEM 507 | 3 | BIOCHEM 508 | 3 |
| PHM SCI 558 | 2 | PATH 404 | 3 |
| ANAT&PHY 335 | 5 | PHM SCI 679 | 1 |
| STAT 371 | 3 | PHYSICS 103 | 4 |
| | | Research (699) credits | 2-3 |
| 13 | | 13-14 | |

Senior

| Fall | Credits | Spring | Credits |
|--|---------|--|---------|
| PHM SCI/ PHM COL-M 521 | 3 | PHM SCI/ PHM COL-M 522 | 3-4 |
| PHM SCI/ M&ENVTOX/ ONCOLOGY/ PHM COL-M/ POP HLTH 625 | 3 | PHM SCI/ M&ENVTOX/ PATH/ PHM COL-M/ POP HLTH 626 | 3 |
| PHM SCI 623 ¹ | 3 | PHM SCI 679 | 1 |
| PHYSICS 104 | 4 | GENETICS 466 | 3 |
| Electives in the Major or add'l research credits | 2-3 | Electives | 3-4 |
| 15-16 | | 13-15 | |

Total Credits 116-128

1

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