# PHARMACOLOGY AND TOXICOLOGY, B.S. 

Begin Campus: Any Penn State Campus
End Campus: University Park

## Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2023-24 academic year. To access previous years' suggested academic plans, please visit the archive (https:// bulletins.psu.edu/undergraduate/archive/) to view the appropriate Undergraduate Bulletin edition (Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin).

## Pharmacology and Toxicology, B.S. at University Park Campus

The course series listed below provides only one of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an Academic Requirements or What If report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| VBSC 50 | 3 ENGL 15,30H, or ESL $15^{\ddagger \dagger}$ | 3 |
| BIOL 110*\#† | 4 BIOL 230W* | 4 |
| CHEM 110*\# $\dagger$ | 3 CHEM 112*\# $\dagger$ | 3 |
| CHEM 111*\# ${ }^{\text {* }}$ | 1 CHEM 113*\# $\dagger$ | 1 |
| MATH 140 ${ }^{\text {*\#\# }}$ | 4 MATH 141 ${ }^{\text {\#\#\# } \dagger}$ | 4 |
| General Education Course | 0-3 General Education Course | 0-3 |
|  | 15-18 | 15-18 |

## Second Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| BIOL 220W | 4 BIOL 240W | 4 |
| PHYS 250 | 4 PHYS 251 | 4 |
| CHEM 210 | 3 CHEM 212 | 3 |
| CAS 100, CAS 100A, CAS <br> 100B, or CAS 100C <br>  <br> General Education Course <br> (GHW) | 3 CHEM 213 | 2 |
| General Education Course | 1.5 VBSC 230 | 3 |
|  | $\mathbf{1 5 . 5 - 1 8 . 5}$ | $\mathbf{1 7 . 5}$ |


| Third Year |  |  |
| :--- | :---: | ---: |
| Fall | Credits Spring | Credits |
| BMB 211 | 3 BMB 221 | 2 |
| BMB 212 | 1 VBSC 438 (or Elective <br> or 400-level Supporting <br> Course) $^{*}$ | 3 |
|  | 3 ENGL 202C |  |


| Supporting Course 400 Level or Elective | 3 General Education Course | 3 |
| :---: | :---: | :---: |
| VBSC 496 or 395 | 0-3 |  |
|  | 16-19 | 14-18 |
| Fourth Year |  |  |
| Fall | Credits Spring | Credits |
| VBSC 430* | 3 VBSC/BMB 433* | 3 |
| VBSC/ERM 431* | 3 VBSC 438 (or Elective or 400 -level Supporting Course) ${ }^{*}$ | 3-6 |
| VBSC 451 ${ }^{*}$ | 3 Supporting Course 400 Level or Elective ${ }^{*}$ | 3 |
| VBSC 395 or 496 | 2-3 General Education Course | 3 |
| Elective or 400-level | 3-6 VBSC 496 or 395 | 2-3 |
| Supporting Courses |  |  |
| General Education Course | 3 |  |
|  | 17-21 | 14-18 |

Total Credits 124-148

* Course requires a grade of C or better for the major
$\ddagger$ Course requires a grade of $C$ or better for General Education
\# Course is an Entrance to Major requirement
† Course satisfies General Education and degree requirement


## University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, $M, X$, and $Y$ are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of ' $C$ ' or better.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student's program prescribes GWS these courses will replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C. Each course is 3 credits.

## Advising Notes:

- Students must complete all of the BIOL 220W, BIOL 230W, and BIOL 240W sequence to fulfill the Writing Across the Curriculum requirement.
- If completing CHEM 212, CHEM 213 must also be completed.
- Work with your academic adviser in the development of your plan as some courses are not taught every semester.
- Electives and Supporting Courses - Supporting courses are 400-level courses chosen from a department-approved list or approved by the Program Coordinator. Students must take 9 credits of supporting
courses ( 6 credits of which must have a grade of C or better).
Elective credits may be used to earn a minor, usually commencing
in the fifth semester. Please consult with your academic adviser for planning.


## Pharmacology and Toxicology, B.S. at Commonwealth Campuses

The course series listed below provides only one of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an Academic Requirements or What If report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

| First Year |  |  |
| :---: | :---: | :---: |
| Fall | Credits Spring | Credits |
| First Year Seminar | 0-3 ENGL 15,30H, or ESL $15^{\ddagger \dagger}$ | 3 |
| BIOL 110*\# | 4 BIOL 230W ${ }^{\text {\# }}$ | 4 |
| CHEM 110 ${ }^{\text {*\#t }}$ | 3 CHEM 112*\# | 3 |
| CHEM 111 ${ }^{\text {*\# }}$ | 1 CHEM 113*\# ${ }^{\text {* }}$ | 1 |
| MATH 140 ${ }^{\text {* } \ddagger+}$ | 4 MATH 141 ${ }^{\text {*\#\# } \dagger}$ | 4 |
| General Education Course | 3 General Education Course | 0-3 |
|  | 15-18 | 15-18 |
| Second Year |  |  |
| Fall | Credits Spring | Credits |
| BIOL 220W | 4 BIOL 240W | 4 |
| PHYS 250 | 4 PHYS 251 | 4 |
| CHEM 210 | 3 CHEM 212 | 3 |
| CAS 100, CAS 100A, CAS 100B, or CAS $100 \mathrm{C}^{\ddagger \dagger}$ | 3 CHEM 213 | 2 |
| General Education Course (GHW) | 1.5 VBSC 230 | 3 |
| General Education Course | 0-3 General Education (GHW) | 1.5 |
| 15.5-18.5 |  | 17.5 |

## Third Year

| Fall | Credits Spring | Credits |
| :--- | :---: | ---: |
| BMB 211 | 3 BMB 221 | 2 |
| BMB 212 | 1 VBSC 438 (or Elective <br> or 400-level Supporting <br> Course) | 3 |
|  | 3 ENGL 202C |  |


| VBSC 496 or 395 | $0-3$ |  |
| ---: | ---: | ---: |
|  | $\mathbf{1 6 - 1 9}$ | $\mathbf{1 4 - 1 8}$ |

## Fourth Year

| Fall | Credits Spring | Credits |
| :---: | :---: | :---: |
| VBSC 430* | 3 VBSC/BMB 433* | 3 |
| VBSC/ERM 431* | 3 VBSC 438 (or Elective or 400-level Supporting Course) ${ }^{*}$ | 3-6 |
| VBSC 451 ${ }^{*}$ | 3 Supporting Course 400 Level or Elective ${ }^{*}$ | 3 |
| VBSC 395 or 496 | 2-3 General Education Course | 3 |
| Elective or 400-level | $3-6$ VBSC 496 or 395 | 2-3 |
| Supporting Courses |  |  |


| General Education Course | 3 |  |
| :--- | ---: | ---: |
|  | $17-21$ | $14-18$ |

Total Credits 124-148

* Course requires a grade of $C$ or better for the major
$\ddagger$ Course requires a grade of $C$ or better for General Education
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- Work with your academic adviser in the development of your plan as some courses are not taught every semester.
- Electives and Supporting Courses - Supporting courses are 400-level courses chosen from a department-approved list or approved by the Program Coordinator. Students must take 9 credits of supporting courses ( 6 credits of which must have a grade of $C$ or better). Elective credits may be used to earn a minor, usually commencing in the fifth semester. Please consult with your academic adviser for planning.

