

THE UNIVERSITY OF RHODE ISLAND

Pharmaceutical Sciences-BS
 120 Credits Total
 Page 1 (40 credits of General Education)

2019-2020 Catalog Year
 Effective Fall 2019
 Class of 2023

ABOUT THE PHARMACEUTICAL SCIENCE BS DEGREE:

The four-year program offers students a solid foundation in the basic sciences and expertise within the pharmaceutical and biomedical sciences. It is designed to provide educational and training experiences that prepare students for careers in the pharmaceutical, consumer product, and biomedical industries. Graduates of the B.S.P.S. program will be qualified to seek a diverse range of career options that include: research and development, manufacturing, product marketing, sales, quality, and administrative positions within the pharmaceutical industry; research and regulatory oversight careers within government agencies; and research and teaching positions in academia. As a prelude to many of these career opportunities, the program prepares students for graduate studies in the expanding fields of pharmaceutical and biomedical sciences.

GENERAL EDUCATION GUIDELINES: General education is 40 credits. Each of the twelve outcomes (A1-D1) must be met by at least 3 credits. A single course may meet more than one outcome, but cannot be double counted towards the 40 credit total. At least one course must be a Grand Challenge (G). No more than twelve credits can have the same course code (note- HPR courses may have more than 12 credits). General education courses may also be used to meet requirements of the major or minor when appropriate.

General Education Credit Count			
At least 40 cr., No more than 12 credits with the same course code. (Note: Not all boxes need to be filled to add to 40 credits)			
Course	Cr.	Course	Cr.
COM100	3		
WRT106	3		
ECN201	3		
CHM101	3		
BIO101	3		
MTH103 (n/a if placed in MTH131)	3 (or n/a)		
MTH131	3		
BIO103	1		
		Total Gen Ed credits	≥ 40

General Education Outcome Audit	
	Course
KNOWLEDGE	
A1. STEM CHM101, MTH 103, MTH131	BIO101, 103
A2. Social & Behavioral Sciences	ECN201
A3. Humanities	
A4. Arts & Design	
COMPETENCIES	
B1. Write effectively	WRT106
B2. Communicate effectively	COM100
B3. Mathematical, statistical, or computational strategies	MTH103/131
B4. Information literacy	WRT106
RESPONSIBILITIES	
C1. Civic knowledge & responsibilities	COM100
C2. Global responsibilities	
C3. Diversity and inclusion	
INTEGRATE & APPLY	
D1. Ability to synthesize	
GRAND CHALLENGE	
G. Check that at least one course of your 40 credits is an approved "G" course	

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Page 2 (53 Pre-requisite credits, including 19 gen ed cr)

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Basic Non-Science Requirements (*these courses also fulfill 9 cr of general education requirements)	Course	Grade	Cr	Semester Plan
Careers in Pharmaceutical Science	BPS 250		1	
Communication *B2, C1	COM 100		3	
Microeconomics *A2	ECN 201		3	
Research Writing *B1, B4	WRT 106		3	
Introduction to URI	URI 101		1	

Basic Science /Math Requirements (*these courses also fulfill 10 cr of general education requirements)	Course	Grade	Cr		QPA
General Biology *A1	BIO 101		3		
General Biology Lab *A1	BIO 103		1		
Human Anatomy & Physiology I	BIO 220		3		
Human Anatomy and Physiology I lab	BIO 221		1		
Human Anatomy and Physiology II	BIO 222		3		
Human Anatomy and Physiology II lab	BIO 223		1		
General Chemistry I *A1	CHM 101		3		
General Chemistry I Lab	CHM 102		1		
General Chemistry II	CHM 112		3		
General Chemistry II Lab	CHM 114		1		
Organic Chemistry Lab	CHM 226		2		
Organic Chemistry I	CHM 227		3		
Organic Chemistry II	CHM 228		3		
Microbiology	CMB 201		4		
Biochemistry	CMB 311		3		
Calculus (or MTH141) *A1, B3	MTH131		3		
Intro to Statistics (or STA 307, 3 cr)	STA 308		4		

* Course approved for General Education

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B.S.P.S. Progression, Retention, and Graduation requirements

B.S.P.S. students request transfer from University College for Academic Success to the College of Pharmacy during the semester in which they are enrolled to complete all science and mathematics pre-requisite courses (BIO 101, 103, 220, 221, 222, 223; CHM 101, 102, 112, 114, 227, and 228; CMB 201 and 311; MTH 131 or 141; and STA 308 or 307). Transfer requests will be reviewed and acted upon after grades are posted for the enrolled courses.

Only those students having an equal or greater than 2.30 grade point average in the required pre-requisite courses (BIO 101, 103, 220, 221, 222, 223; CHM 101, 102, 112, 114, 227, and 228; CMB 201 and 311; MTH 131 or 141; and STA 308 or 307), and an overall cumulative grade point average of 2.00 or above will be admitted to the College of Pharmacy for the B.S. Pharmaceutical Sciences degree. Applicants not meeting the criteria will not be considered for admission to the college.

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Page 3 (45 Credits in the Major)

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Major Requirements (Courses specifically listed are required, 33 credits)			
3rd Year - Fall Semester			
Dosage I	BPS 301		2
Medicinal Chemistry	BPS 313		2
Pharmaceutics II	BPS 315		4
Intro to Pharmaceutical Research	BPS 345		3
Pharmacology I	BPS 401		3
<i>General Education Course</i>			3
3rd Year - Spring Semester			
Pharmacokinetics	BPS 306		2
Drug Metabolism	BPS 325		2
Pharmacology II	BPS 402		3
cGMP Processes	BPS 425		3
Formulations and Manufacturing Lab	BPS 443		2
<i>BSPS Prof Elective: Suggested course: BPS 445</i>			3
4th Year - Fall Semester			
Pharmacogenetics/genomics	BPS 442		3
Med Chem and Mol Bio Techniques Lab	BPS 451		4
<i>BSPS Prof Elective: Suggested Course BPS 497</i>			3
<i>General Education Course</i>			3
<i>General Education Course or elective</i>			3
4th Year - Spring Semester			
<i>BSPS Prof. Elective Suggested BPS 446</i>			3
<i>BSPS Prof. Elective Suggested BPS 498</i>			3
<i>BSPS Prof. Elective or elective</i>			3
<i>Gen Ed</i>			3
<i>Gen Ed or elective</i>			3

BSPS Professional Electives (12 credits required)			
Re-write from slots above			
Suggested Course Code	Substituted Course Code, Course Name	Grade	Cr.
<i>BPS 445</i>			
<i>BPS 446</i>			
<i>BPS 497</i>			
<i>BPS 498</i>			
<p>** Students have the option to tailor their academic program to prepare them for the specific career paths that they choose by taking 12 credits of BSPS pre-approved professional electives. At least 6 of the 12 credits of Professional Electives credits must be under BPS, PHP, or PHC course codes</p>			

B.S in Pharmaceutical Sciences (2019-2020 Catalog)

Class of 2023
Requirements by Semester Sequence

For course titles and pre-requisite information, please visit: uri.edu/catalog

Fall	Spring	Milestones
Year One		
CHM 101* and 102	CHM 112 and 114	Complete BIO, CHM, MTH pre-reqs
BIO 101* and 103*	BIO 220 and 221	Pre-Professional GPA of 2.30 or higher
MTH 103* or MTH 131*	MTH 131 (or if completed, Gen Ed)*	Cumulative GPA of 2.0 or higher
COM 100* or Gen Ed	WRT 106* or Gen Ed	Complete 30 cr.
URI 101	Gen Ed (optional)	
(15 cr. total)	(14-17 cr. total)	

Year Two		
CHM 227	CHM 226	Complete BIO, CHM, CMB, STA pre-reqs
BIO 222 and 223	CHM 228	Pre-Professional GPA of 2.30 or higher
CMB 201	CMB 311	Cumulative GPA of 2.0 or higher
ECN 201* or Gen Ed	STA 308 or 307	Complete 60 cr.
BPS 250	Gen Ed*	Meet progression standards for move from UC to College of Pharmacy
(15 cr. total)	(15-16 cr. total)	

Year Three		
BPS 301	BPS 306	Advanced knowledge of Pharmacology, Medicinal Chemistry, Pharmacokinetics, and Pharmaceutics
BPS 313	BPS 325	
BPS 315	BPS 402	
BPS 345	BPS 425	Maintain Professional GPA of 2.3 or higher
BPS 401	BPS 443	Cumulative GPA of 2.0 or higher
Gen Ed*	BSPS Prof. Elective <i>Suggested BPS 445</i>	Complete 90 cr.
(14-17 cr total)	(15 cr total)	

Year Four		
BPS 442	BSPS Prof. Elective <i>Suggested BPS 498</i>	Knowledge of Pharmacogenomics, Laboratory Methods,
BPS 451	BSPS Prof. Elective <i>Suggested BPS 446</i>	
BSPS Prof. Elective <i>Suggested BPS 497</i>	BSPS Prof. Elective	
Gen Ed*	Gen Ed*	Maintain Professional GPA of 2.3 or higher
Gen Ed* or elective	Gen Ed* or elective	Cumulative GPA of 2.0 or higher
(16 cr total)	(15 cr. total)	Complete 120 cr. for graduation

Note: This plan is not intended to be prescriptive. Credits in transfer, as well as summer or j-term coursework, may result in deviations from the above recommendations.