



B.S. Degree in Pharmaceutical Science Industry Concentration - Effective Fall 2023

FRESHMAN YEAR					
Fall Semester		Credits	Spring Semester		Credits
ENG 101	Written Communication I	3	ENG 102	Written Communication II	3
¹ MAT 117	Precalculus Mathematics I	3	HEA 200 PED 205	Health Education or any 2 CH Physical Education Course	2
BIO 105	Introduction to Biology I w/Lab	4	BIO 106	Introduction to Biology II w/Lab	4
UNV 101	University 101: The Individual and Life	1	¹ MAT 130	Calculus	3
CHE 201	General Chemistry and Qualitative Analysis I w/Lab	4	CHE 202	General Chemistry and Qualitative Analysis II w/Lab	4
Total Credit Hours:		15	Total Credit Hours:		16
SOPHOMORE YEAR					
Fall Semester		Credits	Spring Semester		Credits
CHE 301	General Organic Chemistry I w/Lab	4	CHE 302	General Organic Chemistry II w/Lab	4
BIO 304	Microbiology	4	HIS 106	World Civilizations II	3
PHY 201	Introductory Physics I	4	HUM 201	Humanities I	3
PHY 215	Introductory Physics I Lab	1	² SOC 205 ² PSY 203 ² PSY 308	² Social Science Elective	3
COM 103	Oral Communication	3	BIO 305	Principles of Heredity	3
Total Credit Hours:		16	Total Credit Hours:		16
JUNIOR YEAR					
Fall Semester		Credits	Spring Semester		Credits
BIO 224	Human Anatomy and Physiology I w/Lab	4	BIO 225	Human Anatomy and Physiology II w/Lab	4
PHS 300	Quantitative Lab Techniques	2	BIO 544	Medical Microbiology	3
NUR 320	Scientific Writing for Health Professionals	3	PHS 317	Pharmaceutical Analysis	3
MAT 205	Introduction to Statistics	3	PHS 516	Biostatistics and Research Methods	3
PHS 312	Drug Discovery, Design, and Development	3	PHS 318	Responsible Conduct of Research	1
Total Credit Hours:		15	Total Credit Hours:		14
Summer Session		Credits			
PHS 399	Research Internship	1			
Total Credit Hours:		1			
SENIOR YEAR					
Fall Semester		Credits	Spring Semester		Credits
PHS 511	Applied Biochemistry	3	PHS 414	Introduction to Medicinal Chemistry	4
PHS 571	Biopharmaceutics I	3	PHS 510	Medical Immunology	2
PHS 573	Biopharmaceutics I Lab	1	PHS 572	Biopharmaceutics II	3
PHS 433	General Pharmacology I	3	PHS 574	Biopharmaceutics II Lab	1
PHS 497	Research Capstone	0	PHS 416	Introduction to Drug Information	3
³ Elective	Elective Minimum of 2 CH**	2	PHS 434	General Pharmacology II	3
			PHS 498	Research Capstone	0
Total Credit Hours:		12	Total Credit Hours:		16
Total Credit Hours for the Curriculum a Minimum of:		121			

¹HU students may elect to take Calculus I & II MAT 151-152 (the prerequisite to MAT 151 Calculus I is MAT 118); instead of MAT 117 and MAT 130.

²Students may elect to take Introduction to Sociology (SOC 205), Introduction to Psychology (PSY 203), or Physiological Psychology (PSY 308). Note that Introduction to Psychology (PSY 203) is the prerequisite to Physiological Psychology.

³Students may elect to take any approved pharmacy elective (PHA 572, PHA 582, or PHA 587), Introduction to Computers (CSC 120), Principles of Marketing (MKT 305), or Sales Management (MKT 328). Note that Principles of Marketing (MKT 305) is a prerequisite to Sales Management.