

## Florida Agricultural & Mechanical University Bachelor of Science in Pharmaceutical Sciences Curriculum

Courses (Fall) Semester 1	Semester Hours	Courses (Spring) Semester 2	Semester Hours
CHM 1045 General Chemistry I w/Lab	4	CHM 1046 General Chemistry I w/Lab	4
MAC 1147 Pre-Calculus I *	4	MAC 2311 Calculus I*	4
ENC 1101 Freshman Communication Skills I	3	ENC 1102 Freshman Communication Skills II	3
BSC 1010 General Biology I w/Lab	4	BSC 1011 General Biology II w/Lab	4
<b>Total Semester Hours</b>	<b>15</b>	<b>Total Semester Hours</b>	<b>15</b>

Courses (Fall) Semester 3	Semester Hours	Courses (Spring) Semester 4	Semester Hours
CHM 2210 Organic Chemistry I w/Lab*	4	CHM 2211 Organic Chemistry II w/Lab*	4
PHY 2048 General Physics I w/Lab	5	PHY 2049 General Physics II w/Lab	5
AMH 2091 Intro to African American History	3	ECO 2013 Principles of Economics*	3
HUM 2210 Historical Survey	3	Humanities Elective I	3
<b>Total Semester Hours</b>	<b>15</b>	<b>Total Semester Hours</b>	<b>15</b>

Courses (Fall) Semester 5	Semester Hours	Courses (Spring) Semester 6	Semester Hours
PHA 3426 Physiological Chemistry	3	Pharmaceutical Analysis and Lab	2
PHA 3800 Pharmaceutical Calculations	2	PHA 4510 & 4510L Pharmacology I & Lab	3
PHA 3751 Pharmaceutical Microbiology	3	PHA 4430 & 4430L Medicinal Chemistry I & Lab	3
PHA 3580 Anatomy & Physiology/Pathophysiology I & Lab	5	Drug Delivery & Lab	4
PHA 3110 Physical Pharmacy & Lab	3	Anatomy & Physiology/Pathophysiology II & Lab	5
PHA XXXX Introduction to Pharmaceutical Sciences	2	Scientific Communication	1
<b>Total Semester Hours</b>	<b>18</b>	<b>Total Semester Hours</b>	<b>18</b>

Courses (Fall) Semester 7	Semester Hours	Courses (Spring) Semester 8	Semester Hours
Pharmacoeconomics	3	**Advanced Pharmacology, Advanced Medicinal Chemistry, Advanced Pharmacoeconomics or Biopharmaceutics	3
PHA 4431 Medicinal Chemistry II	3	Research Foundations & Ethics	2
PHA 4431L Medicinal Chemistry II Lab	1	Elective I (Gen. Ed. Social Science)	3
PHA 4511 Pharmacology II	3	Elective II (PHA Course)	3
PHA 4511L Pharmacology II Lab	1	Seminar	1
Seminar	1		
<b>Total Semester Hours</b>	<b>12</b>	<b>Total Semester Hours</b>	<b>12</b>

\*Complete the pre-major common course prerequisites with grade B or better.

\*\*In the last semester of the Program, students get to choose an area of specialization out of the four options listed.

### General Education Requirements

Communications (6 hours)	Freshman Communication I, II (ENC 1101, 1102)
Mathematics (8 hours)	Pre-Calculus and Calculus I (MAC 1147, 2311)
Humanities (6 hours)	Historical Survey (HUM 2210 reqd.) and Humanities Elective I (HUM 2230 recommended)
Social Science (6 hours)	Principles of Economics (ECO 1013 reqd.) and Intro to Sociology or Intro to Psychology (SYG 2000 or PSY 2012)
Natural Science (8 hours)	Biology I, II with Lab (BSC 1010, 1011)
University Specified (3 hours)	Introduction to African American History (AMH 2091)

**Total Hours (37 hours)**