

**Laboratory Science
Associate of Arts
(A.A.)**

Requirements for Major: At least 19 credit hours in the department, including:

Required Courses
CH 151 Fundamentals of Chemistry I (5)
CH 152 Fundamentals of Chemistry II (5)
CH 340 Organic Chemistry I (3)
CH 342 Organic Chemistry Laboratory I (2)

One course and correlated lab course selected from:

CH 320 Analytical Chemistry (3) and CH 321 Analytical Chemistry Laboratory (1)
CH 341 Organic Chemistry II (3) and CH 343 Organic Chemistry Laboratory II (2)
CH 350 Biochemistry I (3) and CH 351 Biochemistry Laboratory I (2)

12 credits - correlated Biology courses including:

BI 301 General Microbiology (4) (Prereq: BI 102 (5) and CH 151 (5))
One Biology Course with Lab chosen from the following (unless otherwise noted, prerequisite for lab course is BI 102 (5)):
BI 103 general Organismal Biology (5)
BI 255 Human Physiology (4)
BI 275 Human Anatomy (4)
BI 325 Microbiology of Human Diseases (5) (Prereq: BI 301 (4))
BI 333 General Genetics (4) (Prereq: BI 102 (5) and CH 151 (5))
BI 354 Molecular Biology Laboratory (3) (Prereq: BI 301 or BI 333 or BI 353)

Notes: Students preparing for admission to a pharmacy school should complete the following recommended courses while completing the AA in Laboratory Science (check with Pre-Pharmacy Advisor since requirements vary by Pharmacy school):

CH 151 Fundamentals of Chemistry I (5)
CH 152 Fundamentals of Chemistry II (5)
CH 340 Organic Chemistry I (3) and CH 342 Organic Chemistry Laboratory I (2)
CH 341 Organic Chemistry II (3) and CH 343 Organic Chemistry Laboratory II (2)
BI 102 General Cellular Biology (5)
BI 250 Introduction to Human Anatomy (3)
BI 255 Human Physiology (4)
BI 301 General Microbiology (4)
MA 140 Statistics (3)
MA 141 Applied Calculus (3) or MA 151 Calculus and Analytic Geometry I (5)
CN 150 Public Speaking (3)
PS 261 College Physics I (5) or PS 281 (5)
AN 112 Cultural Anthropology (3)
SO 100 Introduction to Sociology (3)
EN XXX – Literature Course (3) One Literature in English

General Education Distribution Requirements (AA):

Humanities (6) (GEHU/GECPA) (2 disciplines)	Course Number	Social Sciences (6) (GESS) (2 disciplines)	Course Number	Natural Sciences/ Mathematics (6) (2 disciplines)	Course Number
CN 150 (3)		SO 100 (3)		BI 102 (5)	
EN 110/131/133/ 135/138/177/178 (3)		AN 112 (3)		MA 140 (3)	

Core University/AA-Specific Requirements:

WU 101 (3)* C or Better		Total Hours (62)	
EN 101 (3) C or Better		>= C Grade All Major and Correlated Courses	
MA 116 (3)** C or Better		>= 2.0 Overall Cumulative GPA	

**Students transferring with 24 or more credit hours completed at an accredited post-secondary institution (after graduating from High School) with a GPA of 2.0 or higher are exempt from this requirement*

***May be waived if the student successfully places into a higher-level mathematics course with an ACT score of 25 or higher and then successfully completes that course with a grade of C or higher or if a student presents an ACT score in mathematics of at least 28 (SAT of at least 640).*

Sample 2-Year Schedule for Laboratory Science Major (Pre- Pharmacy)

Associate of Arts

68 Hours

Sample curriculum for students starting in an even numbered academic year. Individual two-year degree plans are developed for each student upon consultation with an academic advisor.

Freshman			
Fall Semester		Spring Semester	
CH 151 – Fundamentals of Chemistry I	5	CH 152 – Fundamentals of Chemistry II	5
BI 102 – General Cellular Biology	5	BI 255 – Human Physiology	4
EN 100 – Freshman Composition	3	MA 151 – Calculus and Analytic Geometry I	5
WU 101 – Washburn Experience	3	SO 100 – Introduction to Sociology	3
TOTAL	16	TOTAL	17
Sophomore			
Fall Semester		Spring Semester	
CH 340 – Organic Chemistry I	3	CH 341 – Organic Chemistry II	3
CH 342 – Organic Chemistry I Lab	2	CH 343 – Organic Chemistry Lab II	2
BI 301 – General Microbiology	4	BI 250 – Introduction to Human Anatomy	3
EN XXX – Course in Literature	3	MA 140 – Statistics	3
PS 261 – College Physics I or PS 281 General Physics I	5	AN 112 – Cultural Anthropology	3
Elective	1	CN 150 – Public Speaking	3
TOTAL	18		17

Please contact the Pre-Pharmacy Advisor to determine appropriate courses for the pharmacy program to which you plan on submitting your application.

Other Requirements:

The plan provided assumes a student enters Washburn University with a Math ACT score of 28 or higher to satisfy the prerequisite requirements for MA151. A lower score will most likely require additional coursework. It is strongly advised that you visit with the Pre-Pharmacy (AA in LS) advisor to work through your individual situation.

Associate of Arts in Laboratory Science (AA in LS):

Students will complete all requirements for AA in LS which will automatically satisfy the KU General Education Core Goals 1-3. The courses SO 100 and AN 112 are needed to satisfy the KU General Education Core Goal 4.

All goals and learning outcomes of the KU Core must be satisfied as a Doctor of Pharmacy (Pharm. D.) degree requirement.

General Studies

A minimum of 68 credit hours of eligible Pre-Pharmacy coursework must be completed prior to matriculation into the professional curriculum of the KU School of Pharmacy. Activity courses in physical education or the arts (music, theatre, etc.) may not be counted as part of the 68- hour minimum.