

MILLERSVILLE UNIVERSITY

Associate Degree Program

Student Name: _____ Student I.D. #: _____

Degree:	AS	REQUIREMENTS FOR AN AS DEGREE
Major:	CHEM	IN CHEMISTRY/PRE-PHARMACY
Option:	Pre-Pharmacy	Total credit hours required: 60.0 minimum

Fundamentals (6.0 credits)

ENGL 110 should be completed as early as possible; COMM 100 must be completed prior to graduation. Students with advanced background in these areas should consult the catalog for other options.

	C.H.	Grade	Q.P.		C.H.	Grade	Q.P.
ENGL 110 Composition	3.0	_____	_____	COMM 100 Fund of Speech	3.0	_____	_____

Liberal Arts Core (24.0 credits)

Subj/Course#	Title	C.H.	Grade	Q.P.	Lab
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1. Humanities and Fine Arts: Two courses minimum totalling at least 6.0 credit hours

Select courses from: Art, Communications & Theatre, English, Foreign Languages, Music, Philosophy

_____	_____	3.0	_____	_____	
_____	_____	3.0	_____	_____	

2. Science and Mathematics: 12.0 credit hour minimum requirement

Select courses from: Biology, Computer Science, Earth Sciences, Mathematics, Physics

PHYS _____	_____	_____	_____	_____	
PHYS _____	_____	_____	_____	_____	
MATH _____	_____	_____	_____	_____	
_____	_____	_____	_____	_____	

3. Social Sciences: Two courses minimum totalling at least 6.0 credit hours

Select courses from: Anthropology, Business, Economics, Geography, History, Government, Psychology, Social Work, and Sociology.

_____	_____	_____	_____	_____	
_____	_____	_____	_____	_____	

* It is highly recommended that students elect an ECON course and either PSYC or SOCY course to satisfy pharmacy admission requirements.

Additional University Requirements (3.0 credits)

WELL 175	_____	3.0	_____	_____	
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MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major: **AS CHEM**

Option: **Pre-Pharmacy**

Major Field Requirements: **20 credits**

Other Requirements: **23.0 - 25.0 credits**

Course No.	Short Title	C.H.	Grade	Q.P.	Course No.	Short Title	C.H.	Grade	Q.P.
REQUIRED CHEMISTRY COURSES (20 credits)					REQUIRED RELATED (23.0 - 25.0 credits)				
CHEM 111	Intro to Chemistry I	4.0	_____	_____	Mathematics (7.0 credits)				
CHEM 112	Intro to Chemistry II	4.0	_____	_____	MATH 130	Elements of Stats	3.0	_____	_____
CHEM 231	Organic Chemistry I	4.0	_____	_____	MATH 161	Calculus I	4.0	_____	_____
CHEM 232	Organic Chemistry II	4.0	_____	_____	Physics (8.0 - 10.0 credits)				
CHEM 265	Quantitative Analysis	4.0	_____	_____	PHYS 231*	Physics I w/Calculus	5.0	_____	_____
					PHYS 232**	Physics II w/Calculus	5.0	_____	_____
					--or--				
					PHYS 131	Physics I w/Algebra	4.0	_____	_____
					PHYS 132	Physics II w/Algebra	4.0	_____	_____
					* PHYS 231 has a prerequisite of MATH 161.				
					** PHYS 232 has a co-requisite of MATH 162.				
					Biology (8.0 credits)				
					Demonstrate competency in Biology 100*				
					BIOL 211	Concepts of Zoology	4.0	_____	_____
					BIOL 221	Concepts of Botany	4.0	_____	_____
					-- or --				
					BIOL 254	Anatomy & Physio I	4.0	_____	_____
					BIOL 255	Anatomy & Physio II	4.0	_____	_____
					* Competency may be demonstrated by one of the following:				
					1) a course grade of "A" or "B" in AP Biology				
					2) a score of 3 or better in the national AP exam				
					3) a successful score on the CLEP exam				
					4) a passing grade for General Biology (BIOL 100)				
POLICY FOR RETENTION IN THE MAJOR:					GENERAL EDUCATION RECOMMENDATIONS:				
Chemistry majors are required to have a 2.00 grade or better in Chemistry courses required for the major at the 100 and 200 level before proceeding to a course for which it is a prerequisite. (Currently, these courses include: CHEM 111, 112, 231, 232, 251, and 265).					It is highly recommended that students elect an ECON course and either PSYC or SOCY course to satisfy pharmacy admission requirements.				

Note to the student: *This form is provided as a guide. It is your responsibility to consult regularly with your adviser to be aware of changes and curriculum details which are not incorporated on this sheet.*