Shawnee State University
Department of Natural Sciences
Degree Checklist

## B.S. Natural Science CHEMISTRY concentration

2016-2017 catalog

	<del></del>	ID#		
NATURAL SCIENCE CURRICULUM		GENERAL ELECTIVES  Additional coursework in any area. A minimum of 120 total earned credit hours		
Chemistry Requirements (24 hours)		(GEP/FYE + Natural Science requirements + Capstone + electives) is required for graduation.		
CHEM 1141 General Chemistry 1	4	yrauuauori.		
CHEM 1142 General Chemistry 2	4			
CHEM 3305 Organic Chemistry 1	4			
CHEM 3306 Organic Chemistry 2	4			
CHEM 3323 Analytical Chemistry 1	4			
CHEM 3325 Analytical Chemistry 2	4			
Chemistry Elective (3-4 hours) - choose 1 cours	se below			
CHEM 4411 Biochemistry	3			
CHEM 4431 Physical Chemistry 1	4			
CHEM 4441 Advanced Inorganic Chemistry 1	4			
Construction of Automore Automore Automore	1			
Second Science Area (12 hours)				
Twelve hours of courses in any one area of science other				
concentration. Students may choose GEOL, BIOL, PHYS, or N must be numbered 1200 or above.	MATH. Math courses			
must be numbered 1200 of above.				
		MATH DECELERACY DECLINDEMENT		
	<del>-</del>	MATH PROFICIENCY REQUIREMENT		
		Proficiency in MATH 1250 (Trigonometry) through completion, or		
		Proficiency in MATH 1250 (Trigonometry) through completion, or through placement in and completion of a higher level math (i.e.		
Third Science Area (6 towns)		Proficiency in MATH 1250 (Trigonometry) through completion, or through placement in and completion of a higher level math (i.e. MATH 2110 Calculus), is required for all BS-Natural Science		
Third Science Area (8 hours)		Proficiency in MATH 1250 (Trigonometry) through completion, or through placement in and completion of a higher level math (i.e.		
Eight hours of courses in any one area of science other the		Proficiency in MATH 1250 (Trigonometry) through completion, or through placement in and completion of a higher level math (i.e. MATH 2110 Calculus), is required for all BS-Natural Science		
Eight hours of courses in any one area of science other the concentration or secondary science area. Students may cho	oose GEOL, BIOL,	Proficiency in MATH 1250 (Trigonometry) through completion, or through placement in and completion of a higher level math (i.e. MATH 2110 Calculus), is required for all BS-Natural Science concentrations.		
Eight hours of courses in any one area of science other the	oose GEOL, BIOL,	Proficiency in MATH 1250 (Trigonometry) through completion, or through placement in and completion of a higher level math (i.e. MATH 2110 Calculus), is required for all BS-Natural Science		
Eight hours of courses in any one area of science other the concentration or secondary science area. Students may cho	oose GEOL, BIOL,	Proficiency in MATH 1250 (Trigonometry) through completion, or through placement in and completion of a higher level math (i.e. MATH 2110 Calculus), is required for all BS-Natural Science concentrations.  ADDITIONAL MINIMUM GRADUATION REQUIREMENTS		
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FIRST YEAR EXPERIENCE (1 hour min.) - SELECT ONE COURSE  FYE is waived for students entering SSU with 30 or more earned credit hours		The New Co	GEP - NATURAL SCIENCES (7 hours min.)  The Natural Sciences requirement of the CER will be extisfied by the		
<u> </u>	ů		The Natural Sciences requirement of the GEP will be satisfied by the		
	FYE: University Foundations	1		core requirements of this degree	2.
HONK 1101	Intro. to Honors	2		ED OLIANITITATIVE DEACONING (2)	
CED ENGLISH COMPOSITION (C)			GEP - QUANTITATIVE REASONING (3 hours min.)		
	GEP - ENGLISH COMPOSITION (6 hours min.)	2	The Quantitative Reasoning requirement of the GEP will be satisfied		
ENGL 1101	Discourse & Comp (A)	3		by the math requirements of this de	gree.
ENGL 1102	Discourse & Comp (B)	3	050.00		
ENGL 1103	Comp for ESL Students 1	3		AL COMMUNICATION (3 hours min.) - S	
ENGL 1105	Comp & Argumentation	3	ARTH 2212	Art History Survey 2 Prof. Comm./Dev. Skills (WI)	3
GED - EINE	& PERFORMING ARTS (3 hours min.) - SELECT C	NE COURSE		Public Speaking/Human Comm.	3 3
ARTH 1101	Introduction to Art	3		5 Interpersonal Comm.	3
ENGL 2275	American Film History	3		Intro to the Teaching Profession (WI)	3
MUSI 1201	Music Appreciation	3	FREN 1111	Elementary French 1	5
MUSI 2211	Music History 1			Elementary French 2	3
THAR 1000	Introduction to Theater	3		Elementary German 1	5
111AN 1000	Introduction to meater	J		Elementary German 2	3
GEP - GI	OBAL PERSPECTIVES (3 hours min.) - SELECT ON	COURSE		Int'l Relations: Model UN & Arab League	3
ARTH 3456	20th Century Art	3		Elementary Spanish 1	5
ENGL 3334	Comparative Queer Theory & Lit. (WI)	3	SPAN 1112	* '	3
ENGL 3348	Comparative Feminist Lit. & Theory (WI)	3	THAR 2212	, ,	3
	World Geography	3	IIIAN ZZIZ	Acting 2	J
	Cultural Geography	3	GED -	HUMAN BEHAVIOR (3 hours min.) - SELE	CT ONE COURSE
HIST 2440	World History II	3		Principles of Cultural Anthropology	
HIST 2540	Intro. to Middle East: History, Peoples & Culture	3	ANTH 2350	1 03	3 3
HIST 3432	Gandhi and Modern India (WI)	3		World Prehistory and Archaeology	3
HIST 3500	History of Southern Africa (WI)	3		Principles of Microeconomics	3
HIST 3550	Islam: Religion, Politics, and Society	3		Principles of Macroeconomics	3
HUMA 2227	Infl. Works in Global Transnational Cultures (WI)	3	POLS 1010	Introduction to Political Science	3
POLS 1210	Introduction to Comparative Politics	3	PSYC 1101	Introduction to Psychology	3
POLS 1410	Introduction to International Relations	3	SOCI 1101	Introduction to Sociology	3
POLS 3410	International Political Economy (WI)	3	SOSC 1110	Foundations of Social Science	3
RELI 3300	Judaism, Christianity, & Islam	3	3000 1110	r candations of bostal bolones	<u> </u>
SOSC 3250	Asia: The Land and its Peoples (WI)	GEP - E	GEP - ENGAGED CITIZENRY (3 hours min.) - SELECT ONE COURSE		
3000 3230	, , ,	3	ARTH 3454	History of American Art	3
GEP - HIST	ORICAL PERSPECTIVES (3 hours min.) - SELECT C	NE COURSE		Foundations of Political Economy	3
ARTH 3366	Non-Western Arts Survey	3	EDUC 2245	Understanding Cultural Diversity (WI)	3
ENGL 2205	Intro to Women's Studies	3	HIST 1330	American History to 1865	3
HIST 2102	Medieval and Renaissance Europe	3	HIST 1340	American History since 1865	3
HIST 2103	Revolutionary Europe (AD 1517-AD 1921)	3		Studies in Amer. Cultural Hist. & Lit. (WI)	3
HIST 2223	Ancient History of the Near East	3	PHIL 3360	Social & Political Philosophy	3
HIST 2430	World History I	3	POLS 1110	National Government	3
HIST 3140	Europe & Rise of Modern World System	3	POLS 1310	Intro to Political Theory	3
HIST 3300	Christianity in Early America (WI)	3	SOSC 2210	Intro to Asian American Studies (WI)	3
HIST 3355	Ohio River Valley History (WI)	3		, ,	
HIST 3410	East Asian History	3	GE	P - LITERATURE (3 hours min.) - SELECT C	NE COURSE
HIST 3430	Ancient Indian Culture/Society	3	ENGL 2200	Introduction to Literature (WI)	3
HIST 3510	History of Islam: 7th thru 15th Century (WI)	3	ENGL 2211	Survey of English Literature 1 (WI)	3
HIST 3520	History of Crusades: Crescent & Cross (WI)	3	ENGL 2212	Survey of English Literature 2 (WI)	3 3
HUMA 2225	Found. Texts in Western Cultural Hist. (WI)	3	ENGL 2247	World Literature (WI)	3
PHIL 2200	Intro to Philosophy	3	ENGL 2251	Survey of American Literature 1 (WI)	3
PHIL 2284	Asian Philosophy (WI)	3	ENGL 2252	Survey of American Literature 2 (WI)	3
RELI 2230	History of Christian Thought	3			
	, v		CEL	- FTHICAL INSIGHT & REASONING /	21 : 1

PHIL 2320

GEP - ETHICAL INSIGHT & REASONING (3 hours min.)

Ethics in Public & Private Life (WI)