EARLY CHILDHOOD - CHILDHOOD – EARLY CHILDHOOD/CHILDHOOD - CHILDHOOD INCLUSIVE LIBERAL ARTS CONCENTRATION

This concentration sheet is effective Fall 2012. However, program requirements may be altered according to SUNY regulations.

Biology Concentration (33 hours)

BIOL 110 Human Biology	3 hrs.
BIOL 131/132 Principles of Biology I & Lab	4 hrs.
BIOL 133/134 Principles of Biology II & Lab	4 hrs.
BIOL 243/244 Biodiversity & Lab	4 hrs.
Plus <u>6</u> elective hours in Biology	
at the 300 and/or 400 level by advisement	6 hrs.
SCI 301 Essential Science I*	3 hrs.
SCI 303 Essential Science II*	3 hrs.
SCI 302 Essential Science Lab*	1 hr.
* Prerequisites for SCI 325	
SCI 325 Science Teaching Assistantship Labs	2 hrs.
[Take 2 consecutive semesters of SCI 325 for 1 hr. per semester OR	

take another 300 or 400 level Biology course by advisement]

EDU 403 Teaching Science in the Elem School	3 hrs
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Chemistry Concentration (34 hours)

CHEM 115 General Chemistry I	3 hrs.
CHEM 125 General Chemistry I (Lab)	1 hr.
CHEM 116 General Chemistry II	3 hrs.
CHEM 126 General Chemistry II (Lab)	1 hr.
CHEM 215 Organic Chemistry I	3 hrs.
CHEM 225 Organic Chemistry I (Lab)	1 hr.
CHEM 216 Organic Chemistry II	3 hrs.
CHEM 226 Organic Chemistry II (Lab)	1 hr.
Plus <u>6</u> elective hours in Chemistry	
at the 300 and/or 400 level by advisement	6 hrs.
SCI 301 Essential Science I*	3 hrs.
SCI 303 Essential Science II*	3 hrs.
SCI 302 Essential Science Lab*	1 hr.
* Prerequisites for SCI 325	
SCI 325 Science Teaching Assistantship Labs	2 hrs.
[Take 2 consecutive semesters of SCI 325 for 1 hr. per semester	r OR take
another 300 or 400 level Chemistry course by advisement]	
EDU 403 Teaching Science in the Elem School	3 hrs.

Earth Science Concentration (32-33 hours)

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GEO 160 Oceanography	3 hrs.
GEO 165 Geology I	3 hrs.
GEO 169 General Geology (Lab)*	1 hr.
GEO 210 Geology II	3 hrs.
GEO 215 Minerals & Rocks*	4 hrs.
GEO 311 Global Climate	3 hrs.
GEO XXX Any 300,400 level Geology elective 3 or	· 4 hrs.
* Prerequisite or corequisite - GEO 165	
SCI 301 Essential Science I*	3 hrs.
SCI 303 Essential Science II*	3 hrs.
SCI 302 Essential Science Lab*	1 hr.
* Prerequisites for SCI 325	
SCI 325 Science Teaching Assistantship Labs	2 hrs.
[Take 2 consecutive semesters of SCI 325 for 1 hr. per semeste	r OR
take another 300 or 400 level Geology course by advisement]	
EDU 403 Teaching Science in the Elem School	3 hrs.

English Concentration (30 hrs.)

Childhood C	DR	Childhood	Inclusive	Education

ENED 354 Literature for the Intermediate Grades	3 hrs.
ENED 357 Literacy, Language & Learning Theory	3 hrs.
ENED 358 Teaching Writing in Interm. Grades	3 hrs.
One of the following World Lit courses:	3 hrs.

ENGL 205 Epic & Romance, ENGL 207 Drama & Film ENGL 209 Novels & Tales, ENGL 211 World Poetry

<u>Plus 9</u> elective hrs. of ENGL at the 200-level or above 9 hrs. (national or world lit surveys highly recommended)

<u>Plus 9</u> elective hrs. of ENGL or ENED at 300-400 level 9 hrs.

(ENED 359 Teaching Poetry in Elementary and Middle School and ENED 353 Reading and Writing Children's Literature are highly recommended)

Early Childhood Education

Early Childhood Education	
ENED 352 Teaching Writing in the Primary Grades	3 hrs.
ENED 357 Literacy, Language & Learning Theory	3 hrs.
One of the following World Lit courses:	3 hrs.
ENGL 205 Epic & Romance, ENGL 207 Drama & Fi	ilm
ENGL 209 Novels & Tales, ENGL 211 World Poetry	1
Plus 9 elective hrs. of ENGL at the 200-level or above	9 hrs.
(national or world lit surveys highly recommended)	
Plus 12 elective hrs. of ENGL or ENED at 300-400 level	əl 12
hrs.	
(ENED 359 Teaching Poetry in Elementary and Mid	
School and ENED 353 Reading and Writing Childre	n's
Literature are highly recommended)	
Early Childhood/Childhood Education Dual Major	
ENED 352 Teaching Writing in the Primary Grades	3 hrs.
ENED 354 Literature for the Intermediate Grades	3 hrs.
ENED 357 Literacy, Language & Learning Theory	3 hrs.
ENED 358 Teaching Writing in Interm. Grades	3 hrs.
One of the following World Lit courses:	3 hrs.
ENGL 205 Epic & Romance, ENGL 207 Drama & Fi	ilm
ENGL 209 Novels & Tales, ENGL 211 World Poetry	,
Plus 6 elective hrs. of ENGL at the 200-level or above	6 hrs.
(national or world lit surveys highly recommended)	
Plus 9 elective hrs. of ENGL or ENED at 300-400 level	9
hrs.	
(ENED 359 Teaching Poetry in Elementary and Mid	
School and ENED 353 Reading and Writing Childre	n's
Literature are highly recommended)	
French Concentration (30 hrs.)	
FREN 215 Intermediate French I	3 hrs.
FREN 216 Intermediate French II	3 hrs.
FREN 308 Advanced French Phonetics & Diction	3 hrs.

FREN 216 Intermediate French II	3 hrs.
FREN 308 Advanced French Phonetics & Diction	3 hrs.
FREN 317 French Conversation	3 hrs.
FREN 318 French Composition	3 hrs.
FREN 319 Survey of French Literature I	3 hrs.
Plus one of the following:	
FREN 315 French Masterpieces	3 hrs.
FREN 316 French Plays & Prose	3 hrs.

Plus <u>9</u> elective hours in French at the	
300 and/or 400 level by advisement	9 hrs.
COE, SUNY Fredonia Rev. 6/19/2013	
Mathematics Concentration (34-36 hrs.)	
MATH 210 Math Structures & Proof	4 hrs.
MAED 301 Mathematics for School Teachers I	3 hrs.
MAED 302 Mathematics for School Teachers II	3 hrs.
MAED 303 Mathematics for School Teachers III	3 hrs.
MAED 310 Reading and Writing Mathematics	3 hrs.
MAED 325 Tech Integration in Math Ed	3 hrs.
One of the following:	3 hrs.
MATH 108 Prize-Winning Mathematics	
MATH 110 Math in Action	
MATH 117 Why Mathematics	
One of the following sequences:	
MATH 120 / 121 Survey of Calculus I / II	6 hrs.
MATH 122 / 123 University Calculus I / II	8 hrs.
One of the following:	3 hrs.
STAT 150 Statistical Ideas	
STAT 200 Statistical Methods	
STAT 350 Probability and Statistics	
EDU 402 Teaching Math in Elem School	3 hrs.
Music Concentration (34 hrs.)	

The music concentration is intended for those whose musical		
experience includes an academic background in music		
(i.e. knowledge of music theory and an ability to read	<u>music)</u>	
and private instruction on an instrument or voice. [NOTE: Incoming Freshmen – A placement exam for theory is available the weekend before school starts in August. Contact		
Music Dept. for further information. Transfer students s contact the Music Dept. for consideration.]	hould	
MUS 121 Aural Theory I	2 hrs.	
MUS 122 Aural Theory II	2 hrs.	
MUS 123 Music Theory I	3 hrs.	
MUS 124 Music Theory II	3 hrs.	
MUED 315 Music, Play, & Self	3 hrs.	
MUS 450 Dir. Studies (Musicianship I/Obs.)	2 hrs.	
MUS 451 Dir. Studies (Musicianship II/Obs.)	2 hrs.	
Plus <u>one</u> of the following:	3 hrs.	
MUS 263 Music History in West Civ I MUS 264 Music History in West Civ II	.	
Plus <u>one</u> of the following: MUS 265 History of Jazz	3 hrs.	
MUS 265 History of 3422 MUS 267 African American Music MUS 270 Hist. of Amer. Pop. Music, 1900-1 Plus any two Music History courses	960	
at the 300 and/or 400 level by advisement	6 hrs.	
Plus any <u>three</u> from the following: [NOTE: MUS 123 is pre-requisite for piano classes. Therefor course must be taken <u>first</u> or approval granted by Mus MUS 118 Piano Class		

MUS 217 Piano Class Inter.	1 hr.
MUS 218 Piano Class Inter.	1 hr.
MUS 317 Piano Class Adv.	1 hr.
MUS 318 Piano Class Adv.	1 hr.
Plus one of the following:	2 hrs.
MUED 210 Guitar (1hr.) & MUED 211 Guitar (1hr.)	
or	
MUTY 270 Soc. Instru. or MUTY 240 Music for SW	/D
Physics Concentration (35-37 hours)	
PHYS 101 Contem. Physics for Non-Sci majors	3 hrs.
PHYS 121 College Physics I	3 hrs.
PHYS 123 College Physics I (Lab)	1 hr.
PHYS 122 College Physics II	3 hrs.
PHYS 124 College Physics II (Lab)	1 hr.
PHYS 311 Acoustics I	3 hrs.
PHYS 318 Basic Electronics	3 hrs.
One of the following sequences:	
MATH 120 / 121 Survey of Calculus I / II	6 hrs.
MATH 122 / 123 University Calculus I / II	8 hrs.
SCI 301 Essential Science I*	3 hrs.
SCI 303 Essential Science II*	3 hrs.
SCI 302 Essential Science Lab*	1 hr.
* Prerequisites for SCI 325	
SCI 325 Science Teaching Assistantship Labs	2 hrs.
[Take 2 consecutive semesters of SCI 325 for 1 hr. per sem	ester OR
take another 300 or 400 level Physics course by advisemen	
EDU 403 Teaching Science in the Elem School	3 hrs.
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Social Studies Concentration (33 hrs.)	
HIST 105 U.S. History to 1877	3 hrs.
HIST 106 U.S. History since 1877	3 hrs.
Plus one of the following:	3 hrs.
POLI 120 American Politics	
POLI 150 U.S. & World Affairs	
Plus one of the following sequences:	6 hrs.
HIST 115 Western Civ. I & HIST 102 World Hist II	
HIST 116 Western Civ. II & HIST 101 World Hist I	
Plus one of the following:	3 hrs.
POLI 321 Political Parties & Interest Groups	

Plus one of the following sequences:	6 hrs.
HIST 115 Western Civ. I & HIST 102 World Hist II	
HIST 116 Western Civ. II & HIST 101 World Hist I	
Plus one of the following:	3 hrs.
POLI 321 Political Parties & Interest Groups	
POLI 323 Elections in America	
POLI 324 President & Congress	
POLI 356 U.S. Foreign Policy	
POLI 370 American Constitutional Law	
POLI 371 Civil Rights & Liberties	
The following 12 hrs. must be at the 300 or 400 level:	
One course in American Minority Studies	3 hrs.
(e.g. SOC 316, HIST 333, HIST 356, etc.)	
One course in Non-Western Studies	3 hrs.
One course in European Studies	3 hrs.
One course in U.S. History	3 hrs.
EDU 404 Teaching Social Studies in Elem Sch	3 hrs.

Spanish Concentration (30 hrs.)

SPAN 215 Intermediate Spanish I	3 hrs.
SPAN 216 Intermediate Spanish II	3 hrs.
SPAN 313 Spanish Conversation	3 hrs.
SPAN 314 Spanish Composition	3 hrs.
SPAN 315 Intro to Readings in Hispanic Literature	3 hrs.
Plus <u>15</u> elective hours in Spanish	15 hrs.
at the 300 and/or 400 level by advisement	