

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 Intro Ecology & Evolution & Lab	4 hrs.
BIOL 133/134 Intro Cell & Molecular Biology & 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.

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 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)

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 semester 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 OR 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 Intern. Grades	3 hrs.
<u>One</u> 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

ENED 352 Teaching Writing in the Primary Grades	3 hrs.
ENED 357 Literacy, Language & Learning Theory	3 hrs.
<u>One</u> 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 12</u> elective hrs. of ENGL or ENED at 300-400 level	12 hrs.
(ENED 359 Teaching Poetry in Elementary and Middle School and ENED 353 Reading and Writing Children'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 Intern. Grades	3 hrs.
<u>One</u> 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 6</u> elective hrs. of ENGL at the 200-level or above	6 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)	

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 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 9 elective hours in French at the
300 and/or 400 level by advisement 9 hrs.

COE, SUNY Fredonia Rev. 5/26/15

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.

Plus one of the following: 3 hrs.

MATH 108 Prize-Winning Mathematics
MATH 110 Math in Action
MATH 117 Why Mathematics

Plus one of the following sequences:

MATH 120 / 121 Survey of Calculus I / II 6 hrs.
MATH 122 / 123 University Calculus I / II 8 hrs.

Plus one of the following: 3 hrs.

STAT 150 Statistical Ideas
MAED 240 Statistics for School Teachers
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 music)
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 should
contact the Music Dept. for consideration.]

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 one of the following: 3 hrs.

MUS 263 Music History in West Civ I
MUS 264 Music History in West Civ II

Plus one of the following: 3 hrs.

MUS 265 History of Jazz
MUS 267 African American Music
MUS 270 Hist. of Amer. Pop. Music, 1900-1960

Plus any two Music History courses
at the 300 and/or 400 level by advisement 6 hrs.

Plus any three from the following:

[NOTE: MUS 123 is pre-requisite for piano classes. Therefore, this
course must be taken first or approval granted by Music Dept.]

MUS 118 Piano Class 1 hr.

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 SWD

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.

Plus 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 semester OR
take another 300 or 400 level Physics course by advisement]

EDU 403 Teaching Science in the Elem School 3 hrs.

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
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	