

# EARLY CHILDHOOD - CHILDHOOD - CHILDHOOD INCLUSIVE - LIBERAL ARTS CONCENTRATION

This concentration sheet is effective Fall 2009. However, program requirements may be altered according to SUNY regulations.

## Art Concentration (30 hrs.)\*

Studio Art (6 hours)	
ARTS 102 Foundations in 2-D Form & Content	3 hrs.
ARTS 105 Foundations in Drawing	3 hrs.
Foundations of Art History (6 hours)	
ARTH 101 Art in Culture to 1400	3 hrs.
ARTH 102 Art in Culture from 1400	3 hrs.
Plus <u>18</u> elective hours in Art History at the 300 and/or 400 level by advisement	
	18 hrs.

**\* Changes effective for Fall 2009 Registration and apply to ALL students**

## 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 Science for Elem School Teachers I*	3 hrs.
SCI 303 Science for Elem School Teachers II*	3 hrs.
SCI 302 Science for Elem School Teachers (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 Science for Elem School Teachers I*	3 hrs.
SCI 303 Science for Elem School Teachers II*	3 hrs.
SCI 302 Science for Elem School Teachers (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 Science for Elem School Teachers I*	3 hrs.
SCI 303 Science for Elem School Teachers II*	3 hrs.
SCI 302 Science for Elem School Teachers (Lab)*	1hr.
* 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.) \*

ENED 357 Literacy, Lang. & Learning Theory	3 hrs.
ENED 358 Teaching Writing in Intermediate Grades	3 hrs.

**[Note:** Early Childhood majors take ENED 352 Teaching Writing in Primary Grades – 3 hrs. (**not** ENED 358)]

One of the following: 3 hrs.

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

Two of the following: 6 hrs.

- ENED 353 Reading & Writing Children's Literature
- ENED 354 Literature for Intermediate Grades
- ENED 359 Teaching Poetry in Elem/Middle School

Plus 9 elective hours in English at the 200 level or above (national or world literature surveys highly rec.) 9 hrs.

Plus 6 elective hours in English at the 300 or 400 level (or transfer equivalents) 6hrs.

**\* Changes effective for Fall 2009 Registration and apply to Incoming Freshmen & Transfer students**

## French Concentration (30 hrs.)

FREN 215 Intermediate French I	3 hrs.
FREN 216 Intermediate French II	3 hrs.
FREN 317 French Conversation	3 hrs.
FREN 318 French Composition	3 hrs.
FREN 319 Survey of French Literature I	3 hrs.
FREN 421 Advanced French Pronunciation/Diction	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.

**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 Software for Mathematics Education	3 hrs.
<u>One</u> of the following:	3 hrs.

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 200 Statistical Methods

STAT 350 Probability and Statistics

EDU 402 Teaching Math in Elem School 3 hrs.

**Music Concentration** (34 hrs.)\*

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 any <u>four</u> Music History courses at the 300 and/or 400 level by advisement	12 hrs.
Plus any <u>three</u> from the following:	
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 either:

MUED 210 Guitar (1) &amp; MUED 211 Guitar (1) 2 hrs.

or

MUTY 270 Social Instruments 2 hrs.

\* **Changes effective for Fall 2009 Registration and apply to Incoming Freshmen & Transfer students****College of Education****SUNY Fredonia****COE – Rev. 06/16/2009****Physics Concentration** (35-37 hours)

PHYS 101 Contem. Physics for Non-Sci majors	3 hrs.
PHYS 121 College Physics I	3 hrs.
PHYS 122 College Physics I (Lab)	1 hr.
PHYS 123 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 Science for Elem School Teachers I\* 3 hrs.

SCI 303 Science for Elem School Teachers II\* 3 hrs.

SCI 302 Science for Elem School Teachers (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 <u>one</u> of the following:	3 hrs.

POLI 120 American Politics

POLI 150 U.S. &amp; World Affairs

Plus one of the following sequences: 6 hrs.

HIST 115 Western Civ. I &amp; HIST 102 World Hist II

HIST 116 Western Civ. II &amp; HIST 101 World Hist I

Plus one of the following: 3 hrs.

POLI 321 Political Parties &amp; Interest Groups

POLI 323 Elections in America

POLI 324 President &amp; Congress

POLI 356 U.S. Foreign Policy

POLI 370 American Constitutional Law

POLI 371 Civil Rights &amp; 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 at the 300 and/or 400 level by advisement	15 hrs.