

**Middle Grades Education
Mathematics and Science**
<http://generaleducation.appstate.edu>

FIRST YEAR SEMINAR (3 s.h. required)

___UCO 1200 or HON 1515 or WGC 1103

WRITING ACROSS THE CURRICULUM (6 s.h. required)

___ENG 1000 or FL 1000 or WGC 1103
___ENG 2001 or WGC 2001

MAJOR REQUIREMENTS

___Junior writing in the discipline *
___Senior capstone experience *

(*These hours count in the major requirements, not in the 44 hours of General Education requirements.)

DESIGNATIONS in Perspectives (3 s.h. of each required)

___Fine Arts (FA), ___Historical Studies (HS), ___Literary Studies (LS)

QUANTITATIVE LITERACY (4 s.h. required)

___MAT 1010 ___MAT 1030 ___STT 2810 **
___MAT 1020 ___MAT 1110 ___STT 3820 **
___MAT 1025 ___STT 2820
___STT 1810 **

(** These courses are 3 s.h. courses and do NOT fulfill the Quantitative Literacy requirement on their own. All other courses listed above are 4 s.h. courses and will fulfill the Quantitative Literacy requirement by themselves.)

WELLNESS LITERACY (2 s.h. required) - Choose from the following:

1 s.h. COURSES: PE 1700-1877, PE 1530-1545, (1) _____ (2) _____
2 s.h. COURSES: ___HP 1105, ___HED 1000, ___DAN 1400, ___DAN 1410,
___DAN 1420, ___DAN 2400, ___DAN 2410, ___DAN 2420,
___DAN 3280, ___DAN 3480, ___DAN 3580, ___MSL 1101
3 s.h. COURSES (additional hour counts as elective): ___NUT 2202, ___PE 3008, ___DAN 4460,
___PE 1718, ___PE 1768, ___PE 1769

Note: MAT 1110 Calculus with Analytic Geometry will also count toward the middle grades mathematics concentration.

PERSPECTIVES: Choose one theme (underlined) from each of the following three Perspectives. Complete at least 6 semester hours in each of the themes and 9 semester hours in one of the themes (21 total s.h. required). Within the three Perspectives, you must have 3 s.h. in each of the three Designations: Fine Arts (FA), Historical Studies (HS) and Literary Studies (LS). *Italicized courses appear in multiple themes; however, courses may only be applied to one theme.*

AESTHETIC PERSPECTIVE (6-9 s.h. from one theme; with the exception of "Creative Expressions of Culture," students must take courses from at least two disciplines in their chosen theme)

- Analyzing Style and Form: ___DAN 2010 (FA), ___MUS 2011 (FA), ___*PHL 2013*, ___THR 2010 (FA)
- The Body: Expression, Presentation and Representation: ___DAN 3430, ___IDS 2210, ___THR 3640 (FA)
- Creative Expressions of Culture: ____, ___WGC 2300-2399, ____, ___WGC 3300-3399 (Please check the online course listings for information on specific courses offered each semester.)
- Cultivating Creative Expression: ___ART 2022 (FA), ___MUS 2022 (FA), ___THR 2022 (FA)
- Expressions of Belief: ___ANT 2300, ___COM 3533, ___*REL 2020* (LS)
- How We Tell Stories: ___*ENG 2170*, ___FL 2025 (LS), ___PHL 1502, ___*REL 2020* (LS), ___THR 2005 (FA), ___THR 2610 (FA)
- Shaping the Human Environment: ___*COM 3531*, ___FCS 1000, ___IND 2012
- Social Change Through the Arts: ___ART 2019 (FA)/*SOC 1100* ____, or ___THR 2017/*SOC 1100* ___ (Linked classes (must be taken together) – look for specific sections [600] in course listing), ___MUS 2613 (FA)
- Traditions and Innovations: ___*ART 2130* (FA), ___ENG 2050 (LS), ___HIS 1110 (HS), ___MUS 2611** (HS), ___MUS 2612** (HS), ___MUS 3611** (HS), ___*PHL 2013* (**These courses are 2 semester hours.)

HISTORICAL AND SOCIAL PERSPECTIVE (6-9 s.h. from one theme; with the exception of "Understanding Culture Through Social Practice," students must take courses from at least two disciplines in their chosen theme)

- Ancient Worlds: ___ANT 1420, ___*ART 2030* (FA), ___HIS 2312 (HS), ___REL 2010 (LS)
- Appalachia: ___AS 2410, ___AS 2411, ___AS/GLY 2301, ___COM 3118, ___HIS 3726 (HS), ___AS/MUS 2016, ___SOC 3710
- Capitalism and Its Critics: ___*ECO 2030*, ___FIN 2860, ___HIS 3524, ___MGT 3040, ___PS 3410
- Cultural Diversity: ___*ANT 1415*, ___*ART 2011* (FA), ___GHY 1040, ___HIS 1120 (HS), ___MUS 2023 (FA), ___*REL 1110*, ___SOC 4560, ___WS 2421
- Individual and Society: ___ANT 2420, ___FCS 2111, ___PHL 2000, ___*PSY 1200*, ___RM 2100, ___SOC 1000, ___WS 2400
- Mind: ___FL 2050, ___HIS 3923 (HS), ___IDS 3260, ___PHL 1501, ___*PSY 1200*
- Religion, Myth and Society: ___ANT 2430, ___*ART 2030* (FA), ___IDS 3261, ___*REL 1110*, ___THR 3730
- Revolutions and Social Change: ___COM 3532, ___HIS 1501 (HS), ___MUS 2015 (FA), ___PHL 3030, ___REL 2120, ___*SOC 1100*
- This American Life: ___*ECO 2030*, ___ENG 2350 (LS), ___HIS 1200 (HS), ___MUS 2014 (FA), ___PS 1100, ___PS 3722, ___SW 2020
- Understanding Culture Through Social Practice: ____, ___WGC 2100-2199, ____, ___WGC 3100-3199 (Please check the online course listings for information on specific courses offered each semester.)

LOCAL TO GLOBAL PERSPECTIVE (6-9 s.h. from one theme; with the exception of WGC 1104 in "Investigations Global," students must take courses from at least two disciplines in their chosen theme)

- Empire, Colonialism, and Globalization: ___*ANT 1415*, ___*ART 2130* (FA), ___*ENG 2040* (LS), ___*GLS 2000*, ___HIS 1400 (HS)
- Democracy and Personal Life: ___COM 2112, ___ENG 2130 (LS), ___PS 1200, ___SOC 1110, ___SOC 1530, ___WS 2600
- Global Resources: ___ECO 2620, ___*GHY 1020*, ___NUT 2351, ___TEC 3601
- Identity, Culture and Media: ___*ART 2011* (FA), ___*COM 3531*, ___*ENG 2170*, ___PHL 1503
- Investigations Global: ___WGC 1104 (6 s.h.) (This course is available only to Watauga Global Community Students)
- Origins and Migrations: ___ENG 2030 (LS), ___FCS 2103, ___*GLS 2000*, ___HIS 1600 (HS)
- Performance of Culture: ___COM 3535, ___DAN 2020, ___(ARB/CHN/FRE/GER/JPN/POR/RSN/SNH) 1050, ___(FRE/GER/SNH) 1060*, ___MUS 2018 (FA), ___THR 2020
- Regions in Global Context: ___*ENG 2040* (LS), ___(ARB/CHN/FRE/GER/JPN/POR/RSN/SNH) 1050, ___(FRE/GER/SNH) 1060*, ___*GHY 1020*, ___HIS 1130 (HS),
[NOTE: ___HIS 1520(HS), and ___HIS 1525 (HS) give Honors Credit for HIS 1130. Do not take HIS 1130 in addition to either of these.]
- Sustainability and Global Change: ___FCS 2110, ___GHY 1010, ___PHL 2015, ___PHY 1830, ___SD 2400, ___TEC 2029

(*French, German and Spanish 1060 are all 6 semester hour classes. Only 3 semester hours count toward General Education Requirements.)

The **SCIENCE INQUIRY PERSPECTIVE** requires 8 semester hours from one theme (underlined). Courses in themes marked with an * must be taken sequentially. Check the course descriptions for any pre and co-requisites. *Italicized courses appear in multiple themes; however, courses may only be applied to one theme.*

SCIENCE INQUIRY PERSPECTIVE (8 s.h. from a chosen theme)

- Biology and Society: ___BIO 1101, ___*BIO 1102*
- The Blue Planet: ___*GLY 1104*, ___GLY 1105
- * Chemistry Connections to Our Changing World: ___CHE 1101/ CHE 1110 ____, ___CHE 1102/ CHE 1120 ___
- Global Environmental Change: ___BIO 1103, ___GHY 1011, ___GHY 1012, ___*GLY 1104*
- * How Things Work: ___*PHY 1101*, ___PHY 1102
- * The Physics of Our Technological World: ___PHY 1103, ___PHY 1104
- * Physics of Self Expression: ___*PHY 1101*, ___PHY 1810, ___PHY 1812, ___PHY 1814
- * Physics with Calculus: ___PHY 1150, ___PHY 1151
- Restless Planet: Earth, Environment and Evolution: ___GLY 1101, ___*GLY 1102*, ___GLY 1103

Bachelor of Science –B.S. (or B.M.)

I. General Education Requirements

44 S.H.

II. Professional Education Requirements All courses must be completed with "C" (2.0) or better.

24 S.H.

- C 2300 ____ Teaching and Learning in the Digital Age (2) *Entry course to teacher education. Required prior to admission to teacher education.*
- FDN 2400 ____ Critical Perspectives on Teaching and Learning (2) *Required prior to admission to teacher education. Prerequisite or Co-requisite: CI 2300.*
- PSY 3010 ____ Psychology Applied to Teaching (3) *May be taken prior to or after admission to teacher education. Prerequisite or Co-requisite: CI 2300.*
- SPE 3300 ____ Creating Inclusive Learning Communities (3) *Admission to teacher education required. Prerequisites: CI 2300, FDN 2400, PSY 3010.*
- CI 3400 ____ Policies and Practices in Educational Assessment (2) *Admission to teacher education required. Prerequisites: CI 2300, FDN 2400, PSY 3010.*
- CI 4900 ____ Student Teaching (12) (Graded on S/U basis) *All courses in professional education core must be completed with grades of C (2.0) or better prior to student teaching, along with other courses (including methods and reading) identified within the major to be completed prior to student teaching and/or requiring C (2.0) or better.*

PRAXIS Exams

PRAXIS I: Academic Skill Assessments

*PPST/CBT Reading ____

*PPST/CBT Writing ____

*PPST/CBT Mathematics ____

PRAXIS II:

Subject/Assessment Exam(s) ____

III. Major Requirements:

50-57 S. H.

A. Middle Grades Academic Concentrations: Select two: Language Arts, Mathematics, Science, Social Science. See attached listing of courses and meet with advisor.

CONCENTRATION 1

CONCENTRATION 2

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

B. The following courses must be taken using the cohort model. Please note that all cohort internships and student teaching can be done only in schools that have been identified by ASU as professional development schools. (See following page for additional information).

Block I (Second Semester Junior year. Please note that this block is offered only during the spring term.)

- ** #+ CI 3900 Middle Grades Internship (3)
- ** #+ CI 3910 Middle Level Education (3)
- ** #+ CI 3920 Teaching Young Adolescents (3)
- Courses from academic concentrations

Block II (First Semester Senior Year. Please note that this block is offered only in the fall term.)

- ** #+ CI 4490 Middle Grades Curriculum, Instruction, and Assessment (4)
- ** #+ RE 4630 Reading in the Content Area (2)
- ** #+ CI/RE 4300 Literacy, Language, and Culture in the Middle Grades (3)

Select two, depending on concentrations:

- ** #+CI 3060 Social Studies in the Middle Grades (3)
- ** #+CI 4040 Mathematics in the Middle Grades (3)
- ** #+RE 3150 Language Arts in the Middle Grades (3)
- ** #+GS 4403 Teaching Science in the Middle and High Schools (3)

- #Cannot be taken before being admitted to Teacher Education
- *Should be taken before junior year (Pre-requisite to enter Teacher Education)
- +Must have "C" (2.0) or higher for COE
- **Must be taken before student teaching
- \$Must have "B" (3.0) or higher for Middle Grades

C. Second Academic Concentration Second academic concentration requirements are met upon successful completion of middle grades content concentrations.

D. CI 4450 is to be taken during the student teaching semester.

IV. Electives

3-10 S. H.

TOTAL

128 S. H.

COHORT PLANNING INFORMATION

Courses in the blocks cannot be taken before being accepted into the Reich College of Education and all courses in blocks must be successfully passed with a grade of at least a "C" before student teaching.

Block One (Offered in spring term only)

CI 3900 Middle Grades Internship (3)
CI 3910 Middle Level Education (3)
CI 3920 Teaching Young Adolescents (3)
Courses from academic concentrations

Block Two (Offered in fall term only)

CI 4490 Middle Grades Curriculum, Instruction, and Assessment (4)
RE 4630 Reading in the Content Area (2)
CI/RE 4300 Literacy, Language, and Culture in the Middle Grades (3)

Select two, depending on concentrations:

CI 3060 Social Studies in the Middle Grades (3)
CI 4040 Mathematics in the Middle Grades (3)
RE 3150 Language Arts in the Middle Grades (3)
GS 4403 Teaching Science in the Middle and High Schools (3)

Block Three (Spring semester of senior year)

CI 4450 Portfolio/Exhibition (1)
CI 4900 Student Teaching (12)

GOALS AND OBJECTIVES MIDDLE GRADES EDUCATION (6-9) Bachelor of Science

Middle Grades Majors:

- Are knowledgeable about young adolescents and aware of the educational implications of that knowledge.
- Are knowledgeable in two subject areas.
- Have specialized skills and knowledge regarding appropriate teaching strategies for middle grades students.
- Have a clear, working knowledge of the concept of developmentally responsive models of middle level schooling.

Mathematics and Science Concentrations

Science Concentration (26)

Choose eight semester hours from one of the science inquiry perspectives on this checksheet. Then, take at least one four hour science course from each of the remaining three sciences (biology, chemistry, geology, physics), GS 3300 Educational Applications of Science Concepts (3), and GS 4403 Teaching Science in the Middle and High Schools (3) (Block Two, Fall only)

Mathematics Concentration (24)

MAT 1110 Calculus with Analytic Geometry, Quantitative Literacy (4)
MAT 3910 Introduction to the Logic and Structure of Mathematics I (4)
MAT 3920 Introduction to the Logic and Structure of Mathematics II (4)
CI 4040 Mathematics in the Middle Grades (3) (Block Two, Fall only)

Select at least one of the following courses:

STT 2810 Introduction to Data Analysis and Statistical Inference (3)
MAT 4930 Basic Concepts of Probability and Statistics (3)

Select at least one of the following courses:

MAT 3610 Introduction to Geometry (MAT 1120 and MAT 2110 prerequisites) (3)
MAT 4910 Informal Geometry (3)

Additional courses may be selected from the following list. Courses not listed may be taken with permission from your advisor.

MAT 1120 Calculus with Analytic Geometry II (4)
MAT 2240 Introduction to Linear Algebra (3)
MAT 3010 History of Mathematics (2)
MAT 3110 Introduction to Modern Algebra (3)*

*Prerequisites are MAT 2240 and one of the following: MAT 2110 or MAT 2510

MAT 3520 Instructional Assistance (1)