

**Middle Grades Education
Mathematics and Science Concentrations**

<http://generaleducation.appstate.edu>

NAME _____ MAJOR _____

FIRST YEAR SEMINAR (3 s.h. required)

____ UCO 1200 or HON 1515 or WGC 1103

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

____ English 1000 or FL 1000 or WGC 1103
____ English 2001 or WGC 2202 or WGC 2205

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

____ Fine Arts, ____ Historical Studies, ____ Literary Studies

QUANTITATIVE LITERACY (4 s.h. required)

____ MAT 1010 ____ MAT 1030 ____ STT 1810 **
____ MAT 1020 ____ MAT 1110 ____ STT 2810 **
____ MAT 1025 ____ STT 2820 ____ STT 3820 **

(*These STT courses are 3 s.h. courses and do NOT fulfill the Quantitative Literacy requirement on their own. All of the MAT courses listed above, as well as STT 2820, are 4 s.h. courses and therefore will fulfill the Quantitative Literacy requirement.)

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

1 s.h. COURSES: PE 1700-1877 (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
3 s.h. COURSES (additional hour counts as elective): ____ NUT 2202, ____ PE 3008,
____ DAN 4460

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

PERSPECTIVES: Choose one theme from each perspective. You must choose an 8 hour theme from the science perspective, two 6 hour themes and one 9 hour theme from each of the remaining perspectives (29 s.h. required). *Italicized courses appear in multiple themes; however, courses may not be applied to more than one theme.* Students must select one course with a fine arts (FA) designation, one course with a historical studies (HS) designation, and one course with a literary studies (LS) designation.

SCIENCE INQUIRY PERSPECTIVE (8 s.h. from one theme) *Must be taken sequentially.

- Biology and Society: ____ BIO 1101, ____ *BIO 1102*
- * Chemistry Connections to Our Changing World: ____ CHE 1101/ CHE 1110____, ____ CHE 1102/ CHE 1120____
- Contemporary Science: ____ GSP 1010, ____ GSC 1020, ____ GSG 1030, ____ GSB 1040
- Restless Planet: Earth, Environment and Evolution: ____ GLY 1101, ____ *GLY 1102*
- * The Physics of Our Technological World: ____ PHY 1103, ____ PHY 1104

Note: Please see the science options listed on the attached checksheet before you select one of these perspectives and register for a science course.

AESTHETIC PERSPECTIVE (6-9 s.h. from one theme; students must take courses from at least two disciplines in the 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 (*Priority given to Watauga Global Community students.*)
- 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 3534 (FA)/*SOC 1100* _____, or ____ THR 2017/*SOC 1100* _____ (Linked classes)
- 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; students must take courses from at least two disciplines in the chosen theme)

- Ancient Worlds: ____ ANT 1420, ____ *ART 2030* (FA), ____ HIS 2312 (HS), ____ REL 2010 (LS)
- Appalachia: ____ AS 2410, ____ AS 2411, ____ COM 3118, ____ HIS 3726 (HS), ____ AS/MUS 2016, ____ SOC 3710,
- Cultural Diversity: , ____ *ANT 1415*, ____ GHY 1040, ____ HIS 1120 (HS), ____ *REL 1110*, ____ SOC 4560, ____ WS 2421
- Individual And Society: ____ ANT 2420, ____ FCS 2111, ____ PHL 2000, ____ *PSY 1200*, ____ 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), ____ PHL 3030, ____ REL 2120, ____ *SOC 1100*
- This American Life: ____ ECO 2030, ____ ENG 2350 (LS), ____ HIS 1200 (HS), ____ PS 1100, ____ PS 3722

LOCAL TO GLOBAL PERSPECTIVE (6-9 s.h. from one theme; students may take only one course from a department per theme)

- Empire, Colonialism, and Globalization: ____ *ANT 1415*, ____ *ART 2130* (FA), ____ *ENG 2040* (LS), ____ *GLS 2000*, ____ HIS 1400 (HS)
- Global Resources: ____ ECO 3620, ____ FCS 2351, ____ *GHY 1020*, ____ TEC 3601
- Identity, Culture and Media: ____ PHL 1503, ____ *ENG 2170*, ____ COM 3300, ____ ART 2011 (FA)
- Origins and Migrations: ____ HIS 1600 (HS), ____ *GLS 2000*, ____ FCS 2103, ____ ENG 2030 (LS)
- Performance of Culture: ____ DAN 2020, ____ THR 2020, ____ *FL 1050*, ____ MUS 2018 (FA), ____ COM 3124
- Regions in Global Context: ____ HIS 1130 (HS), ____ *ENG 2040* (LS), ____ *GHY 1020*, ____ *FL 1050*
- Sustainability and Global Change: ____ SD 2400, ____ PHL 2015, ____ PHY 1830, ____ FCS 2110, ____ TEC 2029

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 I 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 I Academic Skills Assessments :	PPST Reading ___	PPST Writing ___	PPST Mathematics ___
PRAXIS II Subject/Assessment Exams (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).

All courses in BLOCK I AND BLOCK II require admission to teacher education, require “C” (2.0) or better in each, and must be successfully completed prior to student teaching.

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)

IV. **Second Academic Concentration** Second academic concentration requirements are met upon successful completion of the two selected middle grades content concentrations.

V. **Electives** 3-10 S. H.

VI. **Total Hours in Program** 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 (24)

Select one option. Your science plan should be approved by your advisor.

Option 1: Biology and Society

Take BIO 1101 and 1102 (8), at least one four hour science class from each the remaining three sciences, and meet other science concentration requirements — a total of 24 hours including GS 4403 Teaching Science in the Middle and High Schools(3)(Block Two, Fall only) and elective science courses as approved by your advisor.

Option 2: Chemistry Connections to Our Changing World

Take CHE 1101, 1110, 1102, 1120 (8) at least one four hour science class from each the remaining three sciences, and meet other science concentration requirements — a total of 24 hours including GS 4403 Teaching Science in the Middle and High Schools (3)(Block Two, Fall only) and elective science courses as approved by your advisor.

Option 3: Contemporary Science

Take two of the four courses listed (8) (GSP 1010 Contemporary Physics, GSC 1020 Contemporary Chemistry, GSG 1030 Contemporary Geology, GSB 1040 Contemporary Biology), at least one four hour science class from each the remaining two sciences, and meet other science concentration requirements — a total of 24 hours including GS 4403 Teaching Science in the Middle and High Schools (3) (Block Two, Fall only) and elective science courses as approved by your advisor.

Option 4: Restless Planet: Life, Earth, and Evolution

Take GLY 1101 Introduction to Physical Geology and GLY 1102 Introduction to Historical Geology (8) at least one four hour science class from each the remaining three sciences, and meet other science concentration requirements — a total of 24 hours including GS 4403 Teaching Science in the Middle and High Schools (3) (Block Two, Fall only) and elective science courses as approved by your advisor.

Option 5: The Physics of Our Technological World

Two, Fall only) and elective science courses as approved by your advisor.

Take PHY 1103 General Physics I and PHY 1104 General Physics II (8) at least one four hour science class from each the remaining three sciences, and meet other science concentration requirements — a total of 24 hours including GS 4403 Teaching Science in the Middle and High Schools (3) (Block, Fall only) and elective science courses as approved by your advisor.

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 prerequisite) (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)
MAT 3520 Instructional Assistance (1)