

# BACHELOR OF SCIENCE IN EDUCATION IN INTEGRATED MATHEMATICS (7-12) - ADOLESCENT LICENSE

## Adolescent/Young Adult Education (7-12) Integrated Mathematics OVERVIEW

In cooperation with various academic disciplines in the University, the Department of Teacher Education offers a four-year AYA Education Program (grades 7-12), Integrated Mathematics, approved by the Ohio Department of Education. The Integrated Mathematics license, Bachelor of Science in Education Degree requires a minimum of 121 semester hours of coursework including a semester of student teaching. Please refer to the four-year plan for additional information. This teaching license requires passage of the Ohio Assessments for Educators in order to be eligible to student teach.

COURSE	TITLE	S.H.
<b>General Education Requirements</b>		
Core Competencies		
ENGL 1550	Writing 1	3
ENGL 1551	Writing 2	3
CMST 1545	Communication Foundations	3
Mathematics Requirement		
MATH 1571	Calculus 1	4
General Education Knowledge Domains		
Some courses are categorized in more than one knowledge domain. Courses can only be used once within the General Education model. Some majors prescribe specific GE courses. If a course has been added to the domains, it is required.		
Arts and Humanities		6
Natural Sciences (2 courses, 1 lab)		7
Social Science		6
PSYC 1560	General Psychology	
Social Science GER		
Social and Personal Awareness		6
General Education Elective / First-Year Experience		3
TCED 1500	Introduction to Becoming a Teacher First Year Experience Course BCOE	
Subject Area Curriculum		
MATH 1572	Calculus 2	4
MATH 2673	Calculus 3	4
MATH 3715	Discrete Mathematics	3
MATH 3720	Linear Algebra and Matrix Theory	3
MATH 3721	Abstract Algebra 1	4
STAT 3743	Probability and Statistics	4
MATH 3750	History of Mathematics	3
MATH 3751	Real Analysis 1	4
MATH 4830	Foundations of Geometry	3
MATH 4896	Senior Undergraduate Research Project	2
MATH 4832	Euclidean Transformations	3
CSIS 2610	Programming and Problem-Solving	4
Select one of the following MATH electives:		
MATH 3705	Differential Equations	3

MATH 4822	Abstract Algebra 2	3
MATH 5828	Number Theory	3
MATH 5835	Introduction to Combinatorics and Graph Theory	3
MATH 5845	Operations Research	3
MATH 5895	Selected Topics in Mathematics	3
Professional Education Curriculum		
FOUN 1501	Introduction to Education	3
PSYC 3709	Psychology of Education	3
SPED 2630	Individuals with Exceptionalities in Society <sup>1</sup>	3
SED 3706	Principles of Teaching Adolescents <sup>2</sup>	3
TERG 3711	Reading Application in Content Areas, Secondary Years <sup>2</sup>	3
FOUN 3708	Education and Society <sup>1,2</sup>	3
Preclinical Curriculum		
FOUN 3710	Educational Assessment <sup>2</sup>	3
SED 4800M	Special Methods: Mathematics <sup>2</sup>	3
Student Teaching Curriculum		
SED 4842	Supervised Student Teaching: High School <sup>2</sup>	10
SED 4842A	Student Teaching Seminar for Secondary Education <sup>2</sup>	2
Total Semester Hours for the Degree: 121 s.h.		

<sup>1</sup> Prerequisites for Preclinical Curriculum

<sup>2</sup> Upper division course

BCOE Notes:

- Neither admission to the University nor declaration of a major related to a teaching field guarantees admission to the BCOE's Teacher Education Programs or candidacy for a teaching license. Formal Admission to Teacher Education (Upper-Division) is required before students are allowed to enroll in junior and senior level courses in the college. Undetermined Education students must declare a major before applying for admission to the Teacher Education Program.
- Admission to the Teacher Education Program is obtained upon satisfactory completion of the following requirements:
  - Minimum completion of 50 s.h.
  - Minimum 2.75 overall GPA
- Meet one of the following criteria:
  - Overall GPA 3.4 or better, OR
  - ACT scores of Reading 21, English 18, Mathematics 22, OR
  - SAT scores of Reading 450, Writing 430, Mathematics 520, OR
  - Praxis CORE scores, Reading 156, Writing 162, Mathematics 150
- Grade of "B" or better in:
  - ENGL 1550
  - ENGL 1551
  - If failure to receive a grade of "B" or better in ENGL 1550 and ENGL 1551 - ENGL 2601 grade must be a "B" or better. If you receive a "C" or below, you will need to retake the course.
- Grade of "B" or better in the following courses. If you do not have a "B" or better, you will need to retake one or more of these courses until the "B" is achieved.
  - FOUN 1501
  - CMST 1545
  - SPED 2630
  - MATH 3715
- Professional education, preclinical, and student teaching courses may only be repeated one time.

- Minimum requirements for teachers' licenses are determined by the Ohio Department of Education; if those requirements change, they become effective immediately at Youngstown State University.

Upper Division Notes:

Upper Division Application (The application and forms must be completed and printed from the BCOE website.)

- After candidates have completed a minimum of 50 s.h., they should submit an Upper Division application along with the completion of the Good Moral Character Statement, a copy of BCI and FBI clearances, and Dispositional Assessment to the BCOE Office of Student Services, room 2101, no later than:
  - September 1 - to register for upper division courses for Spring
  - February 1 - to register for upper division courses for summer and fall
- Each completed application must be reviewed and approved by the Upper Division Admission and Retention Committee. If all requirements are met, the student will be allowed to register for upper division courses the following semester. Applications submitted after the deadline will not be processed until the end of the respective semester.

Preclinical Application with Request for Graduation Evaluation

- The application must be completed and printed from the BCOE website.
- Preclinical application with the Graduation Evaluation Request summary is to be submitted one year prior to the intended preclinical semester to the BCOE Office of Student Services no later than
  - September 1 - for Fall preclinical
  - February 1 - for Spring preclinical
- Preclinical candidates are screened for eligibility because specific course and grade point average prerequisites must be met.

Student Teaching Notes:

- Prerequisites: BCOE upper division and senior status, overall 2.75 GPA, minimum of 2.67 GPA in subject area curriculum and professional education courses with no grade less than a "C", and passage of OAE test(s) and ACTFL tests for foreign language.
- Instructions for completing the Student Teaching application and forms are available on BCOE website. The application and forms must be completed and printed from the BCOE website and submitted to the BCOE Office of Student Services no later than:
  - September 1 - to student teach the following spring semester
  - February 1 - to student teach the following fall semester

Graduation Process

- Apply for graduation during the first three weeks of the semester you plan to graduate (you must have a graduation evaluation completed in advance).

Completing a Bachelor of Science in Education without Licensure:

- Students choosing to graduate without licensure must apply for approval to graduate without licensure at the BCOE Office of Student Services, 2101 Beeghly Hall, 330-941-3268.
- Once approved, students must complete all program requirements except for student teaching curriculum. In place of student teaching curriculum, students will take TCED 4830 Undergraduate Capstone Course for Education Majors .

General Education Requirements:

- All students must satisfy General Education requirements; some majors, prescribe specific GE courses.
- Courses taken for the major may be applied toward satisfying General Education requirements but credit hours toward graduation cannot be double counted.

- Approved General Education courses can be found at <http://web.yosu.edu/ger>.

Advisement:

- Freshmen, athletes, and students on warning and probation are required to meet with an advisor before registration.
- It is recommended that all majors meet with a faculty advisor every semester.

Financial Aid:

- Eligibility to continue receiving federal financial aid is affected by your "satisfactory academic progress." Carefully review details on the Office of Financial Aid and Scholarship website, <http://cfweb.cc.yosu.edu/finaid/index.cfm> or [http://cfweb.cc.yosu.edu/finaid/sec\\_sap.cfm](http://cfweb.cc.yosu.edu/finaid/sec_sap.cfm).

Other:

- Residency rule requires the last 30 semester hours of your degree and at least 16 semester hours in your major and 21 semester hours in upper-division courses to be completed at YSU.

Course	Title	S.H.
<b>Year 1</b>		
<b>Fall</b>		
ENGL 1550	Writing 1	3
MATH 1571	Calculus 1	4
PSYC 1560	General Psychology	3
FOUN 1501	Introduction to Education	3
TCED 1500	Introduction to Becoming a Teacher First Year Experience Course BCOE	3
<b>Semester Hours</b>		<b>16</b>
<b>Spring</b>		
ENGL 1551	Writing 2	3
MATH 1572	Calculus 2	4
SPED 2630	Individuals with Exceptionalities in Society	3
Arts and Humanities GER		3
Social and Personal Awareness GER		3
<b>Semester Hours</b>		<b>16</b>
<b>Year 2</b>		
<b>Fall</b>		
MATH 2673	Calculus 3	4
MATH 3715	Discrete Mathematics	3
CMST 1545	Communication Foundations	3
Social Science GER		3
<b>Semester Hours</b>		<b>13</b>
<b>Spring</b>		
MATH 3720	Linear Algebra and Matrix Theory	3
MATH 4830	Foundations of Geometry	3
STAT 3743	Probability and Statistics	4
CSIS 2610	Programming and Problem-Solving	4
PSYC 3709	Psychology of Education	3
<b>Semester Hours</b>		<b>17</b>
<b>Year 3</b>		
<b>Fall</b>		
MATH 3750	History of Mathematics	3
MATH 3721	Abstract Algebra 1	4
Arts and Humanities GER		3
Natural Sciences GER		3
MATH Elective		3
<b>Semester Hours</b>		<b>16</b>

**Spring**

FOUN 3708	Education and Society	3
SED 3706	Principles of Teaching Adolescents	3
TERG 3711	Reading Application in Content Areas, Secondary Years	3
Natural Science/Lab GER		4
Social and Personal Awareness GER		3
<b>Semester Hours</b>		<b>16</b>

**Year 4****Fall**

FOUN 3710	Educational Assessment	3
MATH 4896	Senior Undergraduate Research Project	2
SED 4800M	Special Methods: Mathematics	3
MATH 3751	Real Analysis 1	4
MATH 4832	Euclidean Transformations	3
<b>Semester Hours</b>		<b>15</b>

**Spring**

SED 4842	Supervised Student Teaching: High School	10
SED 4842A	Student Teaching Seminar for Secondary Education	2
<b>Semester Hours</b>		<b>12</b>
<b>Total Semester Hours</b>		<b>121</b>