

Education – Secondary Math/Science Option

The Education curriculum prepares students for transfer to baccalaureate-granting institutions by introducing them to the field of education while guiding them through a coherent sequence of liberal arts and sciences courses. By doing this, they prepare for careers in the field of education. After successful completion of this curriculum, students receive an Associate in Arts (A.A.) degree.

The Education – Secondary Math/Science Option is appropriate for students who plan to pursue careers in teaching mathematics, science, or related fields in secondary schools.

The Education curriculum has fourteen transfer agreements with baccalaureate degree-granting institutions in the region. Because transfer institutions require specific courses to be taken prior to entry, it is highly recommended that students consult catalogues of schools to which they might transfer and transfer worksheets available in the Career and Transfer Center, as well as their advisors and mentors, in order to make appropriate selections for their elective courses. According to Pennsylvania mandates under Chapter 354, students will need a 3.0 G.P.A. for entry into teacher certification courses. In addition, they must pass Praxis I – Pre-Professional Skills Test (PPST) before entry into these courses.

PROGRAM ENTRY REQUIREMENTS:

Students interested in the field of education may enroll in this curriculum. They must take College placement tests prior to or at the time of entry in order to receive correct course placement. If needed, students must complete developmental work in English and/or mathematics before enrolling in Education courses. Since students in the Math/Science Option begin mathematics with Calculus I, it is necessary for those students who have not tested into it to take the prerequisite math courses (Math 161 and Math 162, or their equivalents at another college) either before enrolling or while enrolled in the program.

Recommended Course Sequence	Course Number and Name	Prerequisite or Corequisite	Credits
Program Core Courses - Education - Secondary Math/Science Option			
1	ENGL 101 - English Composition I		3
2	MATH 171 - Calculus I	MATH 162 or permission of Dept. Head	4
3	PSYC 101 - Introduction to Psychology		3
4	Art/Music/Philosophy/Foreign Language course ART 103 - History of Art I or ART 104 - History of Art II or MUS 103 - Music for Listeners or MUS 105 - Bach to Beethoven or MUS 106 - Great Romantic Music or MUS 120 - Music of Black Americans or MUS 121 - Modern American Music or PHIL 101 - Introduction to Philosophy or PHIL 211 - Ethical Problems or PHIL 251 - World Religions or PHIL 252 - Philosophy of Religion or Foreign language: any 100 or 200-level course ¹		3
5	HIST 101 - U.S. & Pennsylvania History: The Colonial Period or HIST 102 - U.S. & Pennsylvania History: 19th Century or HIST 103 - U.S. & Pennsylvania History: 20th Century or ECON 181 - Principles of Economics (Macroeconomics) or ECON 182 - Principles of Economics (Microeconomics) ¹		3
6	For Secondary Ed. Math/Physics Teachers: PHYS 111 - General Physics I or PHYS 140 - Mechanics, Heat and Sound ¹ For Secondary Ed Bio, Chem or General Science Teachers: CHEM 121 - College Chemistry	MATH 162 or permission of Dept. Head MATH 171 or permission of Dept. Head CHEM 110 (or permission of Dept. Head) and MATH 118	5-4
7	ENGL 102 - English Composition II	ENGL 101	3
8	MATH 172 - Calculus II	MATH 171	4
9	EDUC 201 - Introduction to Education	ENGL 101 which may be taken concurrently	3
10	EDUC 202 - Introduction to the Foundations of Education Field Experience		3

(continued on next page)

PROGRAM OF STUDY AND GRADUATION REQUIREMENTS:

A minimum of 63 credits and a grade point average of 2.0 are required for graduation.

Recommended Course Sequence	Course Number and Name	Prerequisite or Corequisite	Credits
11	For Secondary Ed. Math/Physics Teachers: PHYS 112 - General Physics II or PHYS 241 - Electricity, Magnetism and Light ¹ For Secondary Ed. Bio, Chem or General Science Teachers: BIO 123 - Cellular and Molecular Biology or CHEM 122 - College Chemistry	PHYS 111 or permission of Dept. Head PHYS 140, MATH 172, or permission of Dept. Head CHEM 121 or CHEM 110 and High School Biology or permission of Dept. Head CHEM 121 with "C" or better	5-4
12	EDUC 225 - Educational Psychology ¹	PSYC 101	3
13	Literature Elective or HUM 101 or HUM 102 - Cultural Traditions ²	ENGL 101 ENGL 101 which may be taken concurrently	3
14	MATH 270 - Linear Algebra For Secondary Ed. Science Teachers: BIO 123 or 124 or CHEM 121 or 122 or PHYS 111 or PHYS 241 or other Bio, Chemistry or Physics ¹	MATH 171 and MATH 172 (172 can be concurrent) See prerequisites listed above	5-4
15	EDUC 226 - Technology for Teachers	CIS 103	3
16	ANTH 112 - Cultural Anthropology or SOC 101 - Introduction to Sociology or GEOG 101 - Introduction to Geography or GEOG 103 - Cultural Geography or GEOG 180 - Urban Geography or GEOG 222 - World Regional Geography ¹	GEOG 101 or GEOG 103	3
17	PSYC 215 - Developmental Psychology		3
18	ENGL 115 - Public Speaking	ENGL 101 which may be taken concurrently	3
19	For Secondary Ed. Math/ Physics Teachers: MATH 271 - Calculus III ¹ For Secondary Ed. Bio, Chem or General Science Teachers: BIO 124 - Organismal Biology or CHEM 122 - College Chemistry or PHYS 112 - General Physics II	MATH 172 BIO 123 CHEM 121 PHYS 111	4

Total to Graduate: 63 credits minimum

¹Consult with your advisor and use transfer worksheets to determine the best course choice.

²Literature is strongly recommended; consult with advisor and transfer worksheets for best choice of courses.

For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130,
Telephone 215-751-8450, or the College Information Center, 215-751-8010.