Colorado	9	
New Mexico	4	
Arizona	16	
Utah	2	
Nevada	0	
	34	(2.7%)

9. *Pacific*

Alaska	0	
Washington	9	
Oregon	18	
California	70	
Hawaii	2	
	99	(7.9%)

Foreign Residence

Argentina	2
Austria	1
Bangladesh	1
Belgium	1
Bolivia	2
Brazil	1
Canada	9
China	2
Colombia	2
El Salvador	2
England	4
France	5
Ghana	2
Greece	1
Hong Kong	6
India	5
Indonesia	1
Italy	1
Japan	5
Kenya	2
Korea	3
Kuwait	1
Malaysia	2
Mauritius	1
Mexico	1
Morocco	1
Nepal	1
New Zealand	1
Oman	1
Pakistan	7
Peru	1
Philippines	3
Saudi-Arabia	1
Singapor	1
Spain	2
Switzerland	3
Thailand	2
The Netherlands	1
Turkey	4
Venezuela	2
Wales	1
West Germany	2
Zimbabwe	1

Totals:	U.S. Residence	1160	(92.2%)
	Foreign Residence	98	(7.8%)

from catalog published 5 years 1983-85

Curriculum

The Bryn Mawr curriculum is designed to encourage breadth of learning and training in the fundamentals of scholarship in the first two years, and mature and sophisticated study in depth in a major program during the last two years. The plan of study looks both backward and forward by taking into account changes in secondary education and the necessary preparations for graduate and professional schools. Its overall purpose is to challenge the student and prepare her for the lifelong pleasure and responsibility of educating herself and playing a responsible role in contemporary society. It encourages independence within a rigorous but flexible framework of divisional and major requirements, and fosters self-recognition for individuals as members of diverse communities and constituencies: national, socio-economic, ethnic, and sexual.

The Bryn Mawr curriculum obtains further breadth through inter-institutional cooperation. In May, 1977, the faculties at Bryn Mawr and Haverford Colleges approved a two-college cooperative plan for the curriculum. Virtually all undergraduate courses and all major programs at each college are open to students from both, greatly increasing the range of available subjects. Full-time Bryn Mawr students may also take courses at Swarthmore College and at the University of Pennsylvania during the academic year without payment of additional fees.

Requirements for the Degree at Bryn Mawr

The degree of Bachelor of Arts is conferred upon students who have completed the requirements described below.

Unit Requirement

All candidates for the A.B. degree shall present 32 units[1] of work.

Summary of Requirements

In brief outline, each student's program will include:

A. two courses in English composition, unless she is exempted;
B. work to demonstrate the required level of proficiency in foreign language and/or mathematics;
C. eight courses, two from each of the divisions I–IV;
D. a major subject sequence;
E. elective units of work to complete an undergraduate program of at least 32 courses.

Divisional Requirement

Students who matriculated before September 1983 may satisfy divisional requirements according to either the unrevised or the revised regulations. Students who matriculate in September 1983 or subsequently must satisfy the revised regulations.

The unrevised regulations are as follows.

Students must complete two courses in one subject for each of the four following disciplinary groups (exception: Group III, see footnote 8), at either Bryn Mawr or Haverford Colleges. The Curriculum Committee will consider petitions from individual students for exceptions to the divisional requirements.

Group I	*Group II*[5]	*Group III*[8]	*Group IV*
History	Biology	English	History
Philosophy	Chemistry	Literature	Philosophy
Anthropology[2]	Geology	Modern	Archaeology
Economics	Physics	Literatures	History of Art
Education	Psychology 101[6]	Classical	History of Religion[9]
Political Science	[Mathematics][7]	Literatures	Music[10]
Psychology[3]			
Sociology[4]			

The revised regulations for meeting the divisional requirements are as follows.

Students must complete two courses in each of four disciplinary groups (for Group II, both courses must be in the same subject.) The four divisions are

I. Social Sciences
II. Laboratory Sciences
III. Literature
IV. Humanities.

The course guide, issued each semester, lists the courses which may be used to fulfill the divisional requirements. The Curriculum Committee will consider petitions from individual students for exceptions.

1. A unit of work is the equivalent of four semester hours.
2. Anthropology 101, 102, if at Bryn Mawr.
3. Two semester courses chosen from: 206, 207, 208, 210, 305, 309; any Haverford courses numbered 111 and above, with the exception of 112f, 113f, and 240b.
4. At least one semester of work at the 100-level is required.
5. Two units of work in laboratory science to meet the *Group II* requirement must include a laboratory that meets a minimum of three hours a week.
6. Or in special cases Psychology 201 and 218.
7. Mathematics may only be used to fill a *group* requirement under the conditions outlined in B below.
8. For combinations of literature courses to meet the *Group III* divisional requirement, a student must consult her dean.
9. Or Religion at Haverford.
10. For music courses which meet the *Group IV* requirement, a student must consult her dean. Courses in music performance do not meet the requirement.

The following directions and qualifications are to be noted by all students:

A. The requirement in Group II must be met before the start of the senior year.
B. A student (not majoring in subjects under Group II) may elect two other courses under Group II, including mathematics, as an alternative to any one of her other divisional requirements.
C. No course may satisfy more than one divisional requirement. A student may not use courses in her major subject to satisfy more than one divisional requirement.
D. English 015 and 016 not meet the divisional requirement in Group III.
E. Interdepartmental courses will be counted toward a given divisional requirement when they are cross-listed under departments included in that division.

English Composition, Foreign Language, and Mathematics Requirements

In addition to the divisional requirements, *each student who matriculates before September 1984* must:

A. Include in her program two semesters of English composition (English 015–016) unless she has achieved a score of 5 on the Advanced Placement Test. The English Department also administers an exemption test.
B. Achieve a certain level of proficiency in two foreign languages or in one language and mathematics, the level to be demonstrated in one of the following ways:
   1. She may demonstrate a knowledge in each of two foreign languages by
      a. passing an examination offered by the College every spring and fall, or
      b. passing with an average grade of at least 2.0 in two units at Bryn Mawr above the elementary level, or
      c. attaining a score of at least 650 (in one language) on a College Board Achievement Test taken in the junior or senior year in high school or by passing with an honor grade an Advanced Placement Test in French or German, or honor grades in two Advanced Placement tests in Spanish or Latin.
   2. She may offer one language to be tested as described above and demonstrate proficiency in mathematics by
      a. attaining a grade of 4 or 5 on the Advanced Placement Test, or

b. passing an examination offered by the Department of Mathematics each spring and fall, or
c. achieving an average grade of at least 2.0 in mathematics (two courses to include at least one course in calculus).

3. She may offer one language to an advanced level of proficiency to be demonstrated by passing with an average grade of at least 2.0 two units at the 300 level.
4. Transfer students will be allowed to meet one of the mathematics or language requirements at another institution.

Each student who matriculates in and after September 1984 must:

A. Include in her program two semesters of English composition (English 015–016) unless she has achieved a score of 5 on the Advanced Placement Test. The English Department also administers an exemption test.

B. *Competence in Language:* A knowledge of one language other than English (or other than the student's language of origin) to be demonstrated by
1. passing a proficiency examination offered by the College every spring and fall, *or*
2. attaining a score of at least 650 in a language achievement test of the College Entrance Examination Board (CEEB), or by passing with an honor grade an Advanced Placement test, also offered by CEEB, or by passing with an honor grade an Advanced Placement Test in French, German, Spanish, or Latin, *or*
3. completing in College two *courses* above the elementary level with an average grade of at least 2.0 or a grade of at least 2.0 in the second course.

C. *Competence in Mathematics:* Students must satisfy each of the two requirements below:
1. Readiness for college level mathematics to be demonstrated at entrance or before final registration for the second semester of the sophomore year by
a. a score of at least 620 in the mathematical section of the SAT (students whose scores are below 620 must take the Bryn Mawr College placement test), *or*
b. a score of at least 3 on an Advanced Placement calculus exam (NB: although a score of 3 demonstrates competence, it will not be given AP credit), *or*

c. passing a proficiency and placement test administered by the College, *or*
d. achieving a grade of 2.0 or higher in any college course in mathematics.

2. Work in college level mathematics or quantitative skills to consist of:
a. passing with an honor grade an Advanced Placement examination in mathematics, *or*
b. passing one course in mathematics at the 100 level or above, *or*
c. passing one course from the following list of courses which teach or use quantitative skills:
Economics 203, Statistical Methods in Economics *or*
Psychology 205, Experimental Methods and Statistics, *or*
Sociology 265, Research Design and Statistical Analysis.

Additional courses will be added to this list; a student should consult her dean for new offerings.

D. *Additional Work in Language or Mathematics:*
1. a foreign language to an advanced level, defined as passing two courses at the *200* level *or above* with an *average* grade of at least "2.0" or a grade of at least "2.0" in the second course, or passing a proficiency test the nature and standard of which are determined by the departments of foreign languages with the approval of the Committee on Curriculum, *or*
2. knowledge of a second foreign language to be demonstrated in the same way as knowledge of the first (above 1), *or*
3. two courses in mathematics at the 100 level or above, including at least one semester of calculus. Only those students who take course work in mathematics below the 100 level to meet the requirement for competence may use the same 100 level course to satisfy both 2,b above and half of this requirement of additional work.

Major Requirements

At the end of the sophomore year each student much choose a major subject and in consultation with the departmental adviser plan an appropriate sequence of major courses. Students may choose to major at Haverford College, in which case they must meet the major requirements of Haverford College and the degree requirements of Bryn Mawr College.

Archaeology, Greek at the 100-level or above, French, Spanish, or Italian at the 200-level or above. Latin 205 is required for those who plan to teach.

Courses taken at the Intercollegiate Center for Classical Studies in Rome (see page 56) are accepted as part of the major. For nonmajors, two literature courses at the 200-level must be taken as a prerequisite for admission to 300-level courses.

001 *Elementary Latin:* Gaisser, Scott, Uhlfelder
Basic grammar and composition, Latin readings. Credit will not be given for Latin 001 without completion of Latin 002.

002 *Elementary Latin:* Gaisser, Scott, Uhlfelder.
Grammar and composition, reading in classical prose and poetry.

003 *Intermediate Latin:* Gaisser, Scott, Uhlfelder.
Intensive review of grammar, reading in classical prose and poetry. For students who have had the equivalent of two years of high school Latin or are not adequately prepared to take Latin 101.

004 *Intermediate Latin:* Gaisser, Scott, Uhlfelder
Reading in classical prose or poetry.

101 *Latin Literature:* Gaisser, Pinney, Scott, Uhlfelder
Selections from Catullus and Cicero.
Prerequisite: more than two years of high school Latin, Latin 001–002, or Latin 003–004.

102 *Latin Literature:* Gaisser, Pinney, Scott, Uhlfelder
Selections from Livy and Horace's *Odes.*

201 *Horace and Satire:* Gaisser, Scott, Uhlfelder
Selections from Horace's *Satires* and *Epistles,* the works of Petronius and Juvenal.

202 *Advanced Latin Literature: The Silver Age:* Gaisser, Scott, Uhlfelder
Readings from major authors of the first and second centuries A.D.
Offered in 1984–85.

202 *Advanced Latin Literature: Comedy:* Gaisser, Scott
Three Roman comedies of Plautus and Terence. Offered in 1983–84.

204 *Medieval Latin Literature:* Uhlfelder
Selected works of Latin prose and poetry from the late Roman Empire through the Carolingian Renaissance. Offered in 1983–84.

205 *Latin Style:* Members of the Department
A study of Latin prose style, based on reading of prose authors and exercises in composition, and of Latin metrics with practice in reading aloud.

206 *The Ancient City:* Scott
Offered on demand.

215 *The Ancient Stage:* Hamilton
Offered in 1983–84. See Greek 215.

301 *Vergil's Aeneid:* Gaisser, Uhlfelder
Offered in 1984–85.

302 *Livy and Tacitus:* Scott
Offered in 1983–84.

303 *Lucretius:* Uhlfelder
Offered in 1983–84.

304 *Cicero and Caesar:* Scott

398 *Senior Conference:* Members of the Department
Topics in Latin literature. By the end of the senior year, students doing their major work in Latin will be required to have completed two examinations: sight translation from Latin to English and comprehensive examination on Latin literature.

Interdepartmental Work: The Department of Latin participates in the interdepartmental majors in classical languages, classical studies and The Growth and Structure of Cities. See pages 176 and 110.

For Roman history, see History 207 and 208.

For Roman architecture, see Classical and Near Eastern Archaeology 324

Teaching Certification Program:
A sequence of work offered by the Department of Latin and the Department of Education and Child Development of the College leads to a certificate to teach in the secondary schools of Pennsylvania.

Mathematics

Professors: Frederic Cunningham, Jr., Ph.D., *Chairman*
Mario Martelli, Ph.D., *Acting Chairman* (1983–84)

Associate Professor: Rhonda J. Hughes, Ph.D.

Assistant Professor: Paul Melvin, Ph.D.

Lecturer: John F. Hughes, Ph.D.

Visiting Lecturer (1983–84): Estelle Basor, Ph.D.

The major in mathematics provides at a minimum a balanced introduction to pure and applied mathematics. Students intending to continue with graduate work in mathematics will want to take more than the minimum major requirements described below.

1983-85

Requirements for the major subject: at least eleven semester courses in mathematics, including Mathematics 101–102, 201–202, 203, 301–302, 303, and 398–399. (Equivalent courses at Haverford or elsewhere may be substituted for any of these except 398–399, the senior conference.)

Requirements for the minor subject: six semester courses in mathematics, of which at least two are at the 300 level.

The following courses in mathematics will be offered in 1983–84:

002 *Precalculus:* Hughes
A preparatory course for students with mathematical deficiencies, as preparation for 100-level courses, especially calculus. Review of algebra, trigonometry, functions, graphing. This course cannot be counted towards the language/mathematics requirement, or for a major or minor in mathematics.

101 *Calculus with Analytic Geometry:* Members of the Department
Differentiation and integration of algebraic and elementary transcendental functions, with the necessary elements of analytic geometry and trigonometry; the fundamental theorem, its role in theory and applications, methods of integration, applications of the definite integral, infinite series.

102 *Calculus with Analytic Geometry:* Members of the Department
Continuation of 101.

103 *Methods and Models:* Melvin
Mathematical concepts, notations, and methods commonly used in the social, behavioral, and biological sciences, with emphasis on manipulative skills and problem solving.

201 *Intermediate Calculus with Linear Algebra:* Martelli
Vectors, matrices, and linear maps, functions of several variables, partial derivatives, multiple integrals, line and surface integrals, vector analysis, Taylor's Theorem, differential equations.

202 *Intermediate Calculus with Linear Algebra:* Martelli
Continuation of 201.

203 *Linear Algebra:* Melvin
Matrices and systems of linear equations, vector spaces and linear transformations, determinants, eigenvalues and eigenvectors, inner product spaces and quadratic forms.

301 *Introduction to Read Analysis:* Basor
The real number system, elements of set theory and topology, continuous functions, uniform convergence, the Riemann integral, power series, Fourier series, and other limit processes. Prerequisite: Mathematics 202.

302 *Introduction to Real Analysis:* Basor
Continuation of 301.

303 *Introduction to Abstract Algebra:* Melvin
Groups, rings, and fields, and their morphisms.

304 *Topics in Algebra:* Melvin
Prerequisite: Mathematics 303.

311 *Differential Equations:* Martelli
Prerequisite: Mathematics 202.

312 *Topology:* J. Hughes.
Prerequisite: Permission of the instructor.

313 *Topology:* J. Hughes
Continuation of 312.

398 *Senior Conference:* R. Hughes

399 *Senior Conference:* R. Hughes
Continuation of 398.

The introductory courses and courses required for the major are offered every year. Other courses, including those listed below, are offered occasionally, depending on the needs and interests of students and faculty.

204 *Theory of Probability with Applications*
307 *Theory of Games*
308, *Applied Mathematics*
309

319 *Dynamical Systems*
320, *Real Analysis*
321

322, *Theory of Functions of a Complex Variable*
323

402, *Unit of supervised independent study.*
403

Teaching Certification:
A sequence of work offered by the Department of Mathematics and the Department of Education and Child Development of the College leads to a certificate to teach in the secondary schools of Pennsylvania.