



**B.S. in Mathematics
Secondary Certification Concentration
Advising Handbook**

2009-2010

Shippensburg University
College of Arts and Sciences
Mathematics Department
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ABOUT THE HANDBOOK:

(last modified 9/24/09 D.K.)

This handbook was created to provide students and advisors with all of the relevant information for attaining a BS in Mathematics with a Pennsylvania-issued certificate to teach mathematics (grades 7-12). Most states surrounding Pennsylvania will accept the certificate. This handbook offers an outline of the four-year program at Shippensburg University. Every attempt has been made to maintain accuracy throughout this handbook. Suggestions for improvement may be made to Dave Kennedy, dikenn@ship.edu.

An electronic version of this handbook can be found at the department website:

webspaceship.edu/math

The forms found in Appendices A and B are also available in the Mathematics Department Office (MCT 250).

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SECTION 1: The Mission of the Program

The mission of the Secondary Certification Concentration program is to successfully prepare undergraduate students for careers in teaching secondary mathematics. Students will be equipped with strong content knowledge, be cognizant of the best practices in teaching mathematics, be familiar with the current national and state standards related to teaching mathematics, and possess the skills and expertise to use state-of-the-art technology in middle grades and high school classrooms. The program will provide certification majors with the foundation and foresight necessary to engage in further graduate studies and/or lifelong learning opportunities.

The Secondary Certification Concentration is accredited by the National Council for Accreditation of Teacher Education (NCATE) and includes methods-of-teaching-mathematics courses endorsed by the Collaborative for Excellence in Teacher Preparation (CETP).

SECTION 2: Advising

As a secondary certification student, you will be assigned two advisors – an academic advisor and a certification advisor. The roles of these two advisors are described below.

ACADEMIC ADVISOR:

You will be assigned an academic advisor at the beginning of your freshman year. You must meet with your academic advisor prior to registering for each semester to be released into the registration process. Your academic advisor can assist you with:

- course selection and sequence decisions, including courses required for certification
- completing the paperwork for declaring a concentration and/or minor
- advice on seeking course waivers, substitutions, or transfer credits
- suggestions on how to improve your performance in the undergraduate program if you are having difficulty, including monitoring of your GPA
- contacting other faculty members who might help you
- insight into University policies
- access to support services offered by the University
- opportunities to conduct research and participate in professional organizations

If, at any time, you prefer to have a different academic advisor, please contact the department secretary for reassignment.

CERTIFICATION ADVISOR:

The four mathematics education faculty members within the department will be serving as certification advisors for all of the secondary certification majors. The assignment of your certification advisor will occur during your freshman year. Your certification advisor will assist you with:

- planning and assessing your Level One Experiences
- meeting all testing and application deadlines
- participating in professional meetings and conferences
- creating and assessing your professional portfolio
- helping you through the certification process

Make sure you meet with your certification advisor at least once each semester to monitor your progress toward certification. Information on your progress will be documented by your certification advisor and shared with your academic advisor.

If, at any time, you prefer to have a different certification advisor, please contact the department secretary for reassignment.

SECTION 3: Program of Study

Certification concentration students earn a B.S. in Mathematics with certification to teach mathematics in grades 7 – 12 in Pennsylvania. The program requires:

- 48 credits of General Education courses
- 31-32 credits of Required Courses in Mathematics, and
- 45 credits of Secondary Education Certification Concentration courses.

These requirements are listed on the *B.S. in Mathematics Check Sheet*, found in Appendix A.

Certification concentration students have some state-mandated general education course requirements that are clearly indicated on the check sheet and described in the requirements for Professional Standing (page 5). Courses with prerequisites and those that are prerequisites must be scheduled accordingly. A *Suggested Course Schedule* and a *Course Frequency Chart* appear in Appendix B; these pages should be consulted when making your course selections and in planning your program of study. Your academic advisor will work with you to make appropriate course sequence decisions.

Your certification advisor will assist you in coordinating field experiences and pre-methods requirements with your coursework. These components are described in sections 4 through 6 of this handbook.

SECTION 4: Professional Requirements

I. Professional Standing

Professional Standing is a designation for students who have met preliminary criteria in their teacher education program and are preparing to begin advanced field experiences.

Applications for Professional Standing (sometimes referred to as applications for Methods or application for Level Two) should be completed and submitted during your third year and at least one semester prior to methods courses. September and February due dates are announced by the Office of Field Services.

Students must have a 3.0 or better GPA and meet the following criteria to be approved for Professional Standing:

- Pass *Writing-Intensive First-Year Seminar* or *English Composition* with a “C” or better;
- Pass *Introduction to Human Communications* with a “C” or better;
- Completed one three-credit science course that covers environmental issues (e.g. *Cons. Of Nat. Resources, Intro to Atmosphere, Intro to Geology, Problems of Environment, Ecology*) as part of the nine science credits;
- Completed a three-credit course to satisfy the Commonwealth’s Intergroup Education Standard, e.g. *Principles of Sociology*;
- Complete the required Level I experiences (see pages 6-8);
- Pass *American School* with a “C” or better;
- Pass *Educational Psychology* with a “C” or better;
- Complete at least 60 credit hours (transfer students: 15 credits with at least a 3.0 GPA);
- Pass a Diversity course (For example: *Sociology, The Black American, etc*);
- Maintain a GPA of 3.0;
- Pass PRAXIS I PPST (See below).

II. Praxis Tests

Students must pass the following standardized tests by the deadlines indicated to continue in the program. Mathematics Department faculty can point students to materials for test preparation and can provide assistance. Testing dates and registration information is available through the Office of Field Services (webspace.ship.edu/coleduc/deans_office) and at the ETS website: www.ets.org.

Praxis I	Successfully complete by end of sophomore year
PPST Reading (1 hour) PPST Writing (1 hour) PPST Mathematics (1 hour – no calculators)	These three are taken at a single test session
Praxis II	Successfully complete by semester prior to Student Teaching
Mathematics: Content Knowledge (Test 10061) (2 hours – graphing calculator required)	

III. Student Teaching Application

Applications to student teach must be completed and submitted to the Office of Field Services during the fall semester of the academic year prior to student teaching (typically the fall of your junior year.) It is highly recommended you have your certification advisor review the application before submitting it to the Office of Field Services.

IV. Clearances

Students must also complete an Act 34 Criminal Record Clearance, an Act 151 Child Abuse Clearance, and a TB tine test. It is the responsibility of the student to make certain these clearances are completed and copies are submitted to the Office of Field Services at the start of the methods semester. An FBI background check and fingerprinting is required of all prospective teachers. Please find more information in Appendix E.

SECTION 5: Professional Experiences

Three levels of professional experiences are required. They are labeled **Level One** (completed before taking the methods-of-teaching-math courses (EDU434 and EDU435)), **Level Two** (completed during the methods-of-teaching-math courses), and **Level Three** (student teaching).

I. Level One Field Experiences

These experiences are completed during Freshman and Sophomore years under the supervision of your certification advisor. These must be completed prior to applying for *Professional Standing* which is required to enroll in the methods-of-teaching-math courses (see Section 4). Evidence and documentation of the experiences must be displayed in a LiveText portfolio. A template for this portfolio (Math: Pre-Methods) is available through your LiveText account.

By no later than April 1st of the calendar year you plan to take the methods courses, email your Certification Advisor to notify them that your LiveText portfolio is ready for inspection.

The following **five required categories** describe the requirements and acceptable activities for Level One Field Experiences.

1. Classroom Observations:

The student will spend **at least 20 hours** (i.e., the equivalent of three full school days) in direct classroom observation of **mathematics** instruction in secondary schools. Approximately half the time should be dedicated to observing in grades 5 through 8 (middle/junior high school), and the other half to observing in grades 9 through 12 (high school). Rural **and** urban settings are required.

Proper arrangements need to be made, with proper permission granted by the authorities in the school where the observations will take place. For schools within an hour's drive of Shippensburg, work through Donna Ackelsberg in the Office of Field Services office in Shippen Hall 356 to arrange visits. For schools farther away, you may make your own arrangements. Observations completed in *American School, Educational Psychology*, or any other education courses may be counted toward this requirement, provided they are mathematics class observations. If full days of observations can not be arranged, partial days of observation can be used to accumulate hours equivalent to three full days. One full day (or about seven hours) should be completed during the freshman year.

Evidence and Documentation – Provide documentation that you made each observation. Provide complete contact information for each teacher observed. Write a one or two page analysis of each of your observation experiences. Respond to the following prompts:

- Describe the setting of the observation and what you observed.
- What was the best teaching strategy that you observed?
- What was the most important thing you learned from your observation about teaching?
- Describe any use of technology or other materials and equipment the teacher used to teach.
- Describe exactly how the teacher interacted with the students and how the students interacted with each other.
- Compare the rural and urban settings.

2. Pre-Teaching Experiences:

Working with students one-on-one is an important part of teaching. Valuable teaching skills can be learned by tutoring individuals or small groups. These experiences also help the certification student learn more about himself or herself as a teacher. Preapproval by the certification advisor is required as is appropriate evidence and documentation of the tutoring experience.

TUTORING: The student will participate at least 40 hours as a volunteer or paid mathematics tutor in a setting approved by the certification advisor. This experience may include tutoring in the SU Math Department's tutoring center, but can also include outside work with students in grades 7-12.

3. Professional Memberships:

The student will become an *active* member in **one or more** of the following professional organizations (or a similar organization approved by the certification advisor) for at least one full year. Student memberships are available for each of these organizations. *Active* membership includes, but is not limited to, joining and attending meetings regularly. Participation in the organization's activities is recommended, such as attending its annual conference, participating in its local conferences and special presentations or workshops, and reading its journal. Documentation of active membership is required.

- **National Council of Teachers of Mathematics** - Premier organization for resources for teaching secondary math. Extensive print and internet resources (www.nctm.org). National and regional conferences are available every year.
- **Pennsylvania Council of Teacher of Mathematics** - State-wide organization for mathematics teachers. Magazine and yearbook print resources. A state conference is held every year. Some internet resources (www.pctm.org).
- **Central Pennsylvania Mathematics Association** - Group of local central Pennsylvania mathematics teachers. One or two local meetings per year.
- **Mathematical Association of America** - The largest professional society that focuses on mathematics accessible at the undergraduate level. Extensive print and internet resources (www.maa.org). National and regional conferences are available every year.

4. Professional Development Activities:

The student must participate in **one or more** of the following activities (or a similar activity approved by the certification advisor). The student will submit to his or her advisor appropriate documentation as evidence of completion of this requirement.

- Attend a school board meeting, or research actions of a school board during a single year and report on the results;
- Interview a teacher about what makes a good mathematics teacher;
- Attend campus events related to educational issues (presentations, conferences, CETP and department seminars, Math Club, KME)
- Attend a school function, such as PTO, teacher in-service program, etc.
- View and report on a special television program related to an educational issue.
- View and report on an educational videotape on a topic such as cooperative learning, discipline, etc.

5. Service-Focused Activities:

An important part of a teaching career is service to the school and community. The activities below provide experience with assisting others.

The student must participate in **one or more** of the following activities (or a similar activity approved by the certification advisor). A total of 10 hours of participation is required. Appropriate documentation must be submitted to the student's advisor.

- Teaching other than public schools (Sunday School teacher, playground director, summer camp counselor, etc.);
- Volunteer work with youth, elderly, etc.
- Participate in campus service projects (Big Sister, Big Brother, Circle K, etc.)
- Civic club/Jaycee work.

II. Level Two Field Experiences

Each student in the methods-of-teaching-math courses receives two different placements to complete clinical experiences. A middle school placement and a high school placement in different school districts are assigned. These experiences are designed to provide opportunities for students to work with cooperating teachers in classrooms where they may return for student teaching. A portfolio of these pre-student teaching experiences is prepared as a course requirement. At the conclusion of the clinical experiences, classroom teachers and certification students assess the experiences and decide whether to continue with student teaching in these placements.

III. Level Three Field Experiences

Student Teaching is the Level Three Field Experience that is a capstone experience for secondary certification mathematics majors. This experience is usually completed during the final semester of the undergraduate program. Students must apply one academic year prior to student teaching. Applications are available in the Office of Field Services (SPH356).

During this experience, student teachers, university supervisors and cooperating teachers in classrooms collaborate to facilitate each student teacher's professional growth and to prepare him/her as a qualified first-year teacher candidate. Supervisory guidelines, observation and evaluation forms, and University policies are provided in the College of Education and Human Services' Student Teaching Handbook.

SECTION 6: Mathematics Certification Portfolio

(Note: This Portfolio is to be housed on LiveText, at www.livetext.com.)

Purpose: To demonstrate the candidate's understanding of mathematical content knowledge, as well as his or her understanding of the connections between content and current theories and best practices associated with becoming a competent secondary mathematics teacher.

Students will be required to prepare a mathematics certification portfolio to complete the program. The portfolio should contain evidence of your growth toward becoming a mathematics teacher. It should include evidence of all pre-professional requirements, a philosophy of education, papers, projects and tests from mathematics and other courses, and especially, artifacts and reflections from school experiences.

Suggestions for Organizing Your Portfolio

Be selective with the components, show your best work.

Photographs may be included.

Demonstration of your technological competence is important.

Your philosophy of teaching should be included and updated periodically.

Other supportive material you feel demonstrates your competency may be included.

Attach reflective components to each artifact.

APPENDIX A

**B.S. in Mathematics Check Sheet &
General Education Check Sheet**

*CAUTION: Some course numbers and names
have changed!*

(also available in Mathematics Department Office MCT 250)

B.S. in MATHEMATICS CHECK SHEET NEW FOR FALL 2009

REQUIREMENTS

The core courses are designed to give students breadth of mathematical experience, while the concentrations allow students to go more in depth in an area of interest. *All students must complete at least 120 credits to graduate.*

For a B.S. Degree in Mathematics

A student must take all the core courses. Beyond the core courses, a student must either

- (a) complete a concentration, or
- (b) take at least 5 courses at the 300 level or above of which at least 2 are at the 400 level, and complete either a minor or 3 allied electives.

CORE COURSES

Mathematics

- ___ MAT 225 Discrete Mathematics
- ___ MAT 211 Calculus I
- ___ MAT 212 Calculus II
- ___ MAT 213 Calculus III
- ___ MAT 313 Statistics I
- ___ MAT 318 Elementary Linear Algebra
- ___ MAT 320 Introduction to Abstract Algebra
- ___ MAT 441 Real Analysis **or** ___ MAT 430 Complex Analysis

Computer Science

- ___ CSC 110 Computer Science I **or** ___ CSC 180 Microcomputer Basic

CONCENTRATIONS

Applied Mathematics Concentration

- ___ MAT 322 Differential Equations
- ___ MAT 326 Mathematical Modeling
- ___ One of
 - MAT 410 Numerical Analysis
 - MAT 413 Statistics II
 - MAT 421 Number Theory and Cryptography
 - MAT 422 Partial Differential Equations
 - MAT 456 Deterministic Methods of Operations Research
 - MAT 476 Probability
- ___ MAT 4xx elective
- ___ MAT 4xx elective

Either

complete a minor: _____

or

*Two Allied Electives and an Interdisciplinary Sequence**

Students with an interest in computer science, physics, biology, chemistry, or other sciences are encouraged to complete the applied mathematics concentration.

Statistics Concentration

- ___ MAT 413 Statistics II
- ___ MAT 476 Probability
- ___ MAT 486 Mathematical Statistics
- ___ MAT 3xx or 4xx elective
- ___ MAT 3xx or 4xx elective

Either

complete a minor: _____

or

*Two Allied Electives and an Interdisciplinary Sequence**

Students with an interest in economics, finance, accounting, actuarial science, or the social sciences are encouraged to complete the statistics concentration.

Secondary Education Certification

- ___ MAT 326 Mathematical Modeling
- ___ MAT 333 Geometry
- ___ MAT 400 History of Mathematics
- ___ MAT 4xx elective
- ___ EEC 411 Introduction to Exceptionalities
- ___ TCH 205 The American School
- ___ TCH 260 Educational Psychology
- ___ EDU 371 Technology in the Mathematics Classroom
- ___ EDU 434 Teaching of Mathematics in the Middle Grades and High School I
- ___ EDU 435 Teaching of Mathematics in the Middle Grades and High School II
- ___ EDU 495 Student Teaching and Professional Practicum

Students who plan on teaching mathematics at the middle school or high school level should complete the secondary education concentration.

B.S. in Mathematics without Concentration

- ___ MAT 3xx or 4xx _____
- ___ MAT 3xx or 4xx _____
- ___ MAT 3xx or 4xx _____
- ___ MAT 4xx _____
- ___ MAT 4xx _____

Either

complete a minor: _____

or

*Three Allied Electives** _____

The "no concentration" option is appropriate for students who desire both depth and breadth across the mathematics curriculum.

GENERAL EDUCATION 48 credits

Gr. Dt.

I. REQUIRED SKILLS AND COMPETENCIES (15 Cr.)

- ___ ___ ENG 106, 101, 110 (one of these)
- ___ ___ HCS 100
- ___ ___ HIS 105
- ___ ___ HIS 106
- ___ ___ Math Competency (Automatically satisfied for math majors.)

II. CATEGORIES OF KNOWLEDGE (33 Cr.)

A. LOGIC AND NUMBERS FOR RATIONAL THINKING (3 Cr.)

(Automatically satisfied for math majors)

B. LINGUISTIC, LITERARY, ARTISTIC, AND CULTURAL TRADITIONS (9 Cr.)

3 Cr. from:

- ___ ___ ENG 243, 248, 250
- ___ ___ FRN 330, 331
- ___ ___ GER 151, 320, 322
- ___ ___ SPN 360, 361

ENG is required for Sec. Ed. Concentration.

6 Cr. from:

(2 different departments)

- ___ ___ ART 101, 231, 232, 274, 339
- ___ ___ FRN 101-103, 150, 202, 204, 320
- ___ ___ GER 101-103, 150, 203, 204, 215
- ___ ___ SPN 101-103, 150, 202, 204, 330, 385
- ___ ___ IAP 111
- ___ ___ MUS 121, 227, 261
- ___ ___ SOC 370
- ___ ___ THE 121

Other language courses, as offered, may be taken in this category.

C. BIOLOGICAL AND PHYSICAL SCIENCES (9 Cr.) (3 different disciplines)

- ___ ___ ANT 121
- ___ ___ BIO 100, 105, 115, 145, 150, 208
- ___ ___ CHM 103, 105, 121
- ___ ___ ESS 108, 110, 111, 210
- ___ ___ PHY 108, 110, 115, 121, 122, 205

One of ESS 108, ESS 110, ESS 111, BIO 145, BIO 208 is required for Sec. Ed. Concentration.

D. POLITICAL, ECONOMIC, AND GEOGRAPHIC SCIENCES (6 Cr.)

(2 different disciplines)

- ___ ___ ECN 101, 102, 113
- ___ ___ GEO 101, 103
- ___ ___ PLS 100, 141

E. SOCIAL AND BEHAVIORAL SCIENCES (6 Cr.)

(2 different disciplines)

- ___ ___ ANT 111
- ___ ___ GEO 140
- ___ ___ PSY 101
- ___ ___ SOC 101
- ___ ___ WST 100

PSY 101 is required for Sec. Ed. Concentration. One of ANT 111 or SOC 101 is required for Sec. Ed. Concentration.

III. DIVERSITY COURSES (3 Cr.)

- ___ ___ ART 101
- ___ ___ CRJ 452
- ___ ___ ECH 460
- ___ ___ EEC 411
- ___ ___ ENG 248
- ___ ___ GEO 103, 140
- ___ ___ MGT 447
- ___ ___ SOC 101
- ___ ___ SWK 265
- ___ ___ WST 100

Diversity courses may double count to fulfill other Gen. Ed. Requirements as well.

NOTES: Gr. – Grade Dt. – Date Cr. – Credits

APPENDIX B

Suggested Course Schedule and Course Frequency Chart

(also available in Mathematics Department Office MCT 250)

Suggested Course Schedule

CAUTION: Some course numbers, names, and semesters have changed!

		Cr		Cr		
1st Year	Fall		Spring			
	MAT211	Calculus I	4	MAT212	Calculus II	4
	ENG106	Writing-I FY Seminar	3	MAT225	Discrete Math	4
	HIS105	World History I	3	HCS 100	Intro Human Comm	3
	PSY101	General Psych	3	HIS106	World History II	3
	Gen Ed Elective	3		Gen Ed Elective	3	
2nd Year	Fall		Spring			
	MAT213	Calculus III	4	MAT313	Statistics I	4
	MAT329	Elem. Linear Algebra	3	MAT320	Intro. to Abstract Alg.	3
		ONE of the following:		TCH260	Ed Psych	3
	CSC110	Computer Science I*	4		Gen Ed Elective	3
		OR			Gen Ed Elective	3
CSC180	Microcomputer Basic	3				
TCH205	American School	3				
	Gen Ed Elective	3				
3rd Year	Fall		Spring			
	MAT333	Geometry	3	MAT326	Math Modeling	3
		ONE of the following:			ONE of the following:	
	MAT430	Complex Analysis**	3	MAT441	Real Analysis**	3
		OR			OR	
	MAT4xx	Math 400-level Elective	3	MAT4xx	Math 400-level Elective	3
		Gen Ed Elective	3	EDU434	Teach of Math in Middle & High School I "Methods I"	3
	Gen Ed Elective	3		Gen Ed Elective	3	
	Gen Ed Elective	3				
4th Year	Fall		Spring			
	MAT400	History of Mathematics	3	EDU495	Student Teaching & Prof Practicum	15
	EDU371	Tech in the Math Class	3			
	EDU435	Teach of Math in Middle and High II "Methods II"	3			
	EEC411	Intro Exceptionalities	3			
	Gen Ed Elective	3				

* Computer Science I is recommended. If you are interested in Computer Science, take it as early as possible so that you can take Computer Science II in the future as well.

** It is required to take at least one of these two courses: Complex Analysis or Real Analysis. If you take both courses, one will count as a 400-level elective.

Course Frequency Chart (2-Year Rotation)

Note: Some course numbers and names have changed!

Two-Year Math Course Cycle

Courses that run every semester:

225 Discrete Mathematics
211 Calculus I
212 Calculus II
213 Calculus III

318 Elementary Linear Algebra
320 Introduction to Abstract Algebra
313 Statistics I

<p><i>Fall of ODD Years</i></p> <p>430 Complex Analysis 333 Geometry 400 History of Mathematics 421 Number Theory and Cryptography 476 Probability</p>	<p><i>Spring of EVEN Years</i></p> <p>441 Real Analysis 322 Differential Equations 326 Mathematical Modeling 410 Numerical Analysis 486 Mathematical Statistics 490 Selected Topics (tentative)</p>
<p><i>Fall of EVEN Years</i></p> <p>430 Complex Analysis 333 Geometry 400 History of Mathematics 422 Partial Differential Equations 413 Statistics II</p>	<p><i>Spring of ODD Years</i></p> <p>441 Real Analysis 322 Differential Equations 326 Mathematical Modeling 425 Advanced Algebraic Structures 450 Combinatorics 456 Deterministic Methods of Operations Research</p>

Courses in **bold** are **core** courses.

As you plan your courses, remember that...

- MAT 333 and MAT 400 are (initially) open only to Secondary Education students. If space remains, then students from other concentrations will be allowed to register.
- Many courses have prerequisites or co-requisites. Be sure you have met the prerequisites before taking a course; co-requisites may be taken before or during a course.
- The special-topics and problem-solving courses are rotated into the schedule on an infrequent basis. As such they are not required of any of the programs.
- The department maintains a list of suggested schedules at <http://webspace.ship.edu/math/programs/>.

APPENDIX C

Certification Timeline

***For the latest information and updates, check the College of Education's web site:

<http://webspace.ship.edu/coleduc/>

SUGGESTED CERTIFICATION TIMELINE

By end of year 1:

- ✓ Consult with academic adviser each semester to schedule required courses.
- ✓ Introduce yourself to your certification adviser and arrange a meeting time.
- ✓ Observe at least one day in a public school (semester 2).
- ✓ Attend and participate in education-related activities and programs.
- ✓ Maintain a 3.0+ GPA.

By end of year 2:

- ✓ Consult with academic adviser each semester to schedule required courses.
- ✓ Meet with your certification adviser each semester.
- ✓ Observe at least two days in public schools (including an urban setting).
- ✓ Register and take the PRAXIS PPST tests. Consider taking PRAXIS II also!
- ✓ Tutor or participate in Supplemental Instruction.
- ✓ Plan and organize pre-methods experiences (LiveText).
 - Classroom Observations
 - Pre-Teaching Experiences
 - Professional Memberships
 - Professional Development Activities
 - Service-Focused Activities
- ✓ Assemble other professional portfolio artifacts (paper and electronic).
- ✓ Maintain a 3.0+ GPA.

By end of year 3:

- ✓ Consult with academic adviser to schedule required courses.
- ✓ Meet with your certification adviser each semester.
- ✓ Join a professional organization.
 - (A student membership in NCTM is strongly recommended!)
- ✓ Complete ALL pre-methods (Level I) experiences and
- ✓ Submit LiveText Portfolio to your certification advisor
- ✓ Take PRAXIS II which is the mathematics "content test."
- ✓ Apply for Student Teaching (fall).
- ✓ Apply for Professional Standing (spring).
- ✓ Continue to develop your professional portfolio.
- ✓ Maintain your 3.0+ GPA.
- ✓ Apply for professional clearances by January (Criminal, Child Abuse, and FBI).

By end of year 4:

- ✓ Apply for graduation.
- ✓ Apply for certification.
- ✓ Complete methods (Level II) and student teaching (Level III) experiences.
- ✓ Present professional portfolio.

GPA requirement: 3.0+ for PA certification.

APPENDIX D

Certification Advisor Check Sheet

B.S. in Mathematics with Certification
CERTIFICATION ADVISOR CHECK SHEET

Name of Student _____ Year Entering Program _____

Academic Advisor _____ Certification Advisor _____

I. Level One Experiences

- | | |
|---|---|
| _____ 1. A. Rural Classroom Observation | _____ 1. B. Urban Classroom Observation |
| _____ 2. Pre-Teaching Experiences
(Tutoring) | _____ 3. Professional Membership(s) |
| _____ 4. Professional Development Activities | _____ 5. Service-focused Activities |

II. Professional Standing

- _____ Pass *Writing-Intensive First-Year Seminar* or *English Composition* with a “C” or better;
- _____ Pass *Introduction to Human Communications* with a “C” or better;
- _____ Completed one three-credit science course that covers environmental issues (e.g. *Cons. Of Nat. Resources, Intro to Atmosphere, Intro to Geology, Problems of Environment, Ecology*) as part of the nine science credits;
- _____ Completed a three-credit course to satisfy the Commonwealth’s Intergroup Education Standard, e.g. *Principles of Sociology*;
- _____ Complete the required Level I experiences (see pages 6-8);
- _____ Pass *American School* with a “C” or better;
- _____ Pass *Educational Psychology* with a “C” or better;
- _____ Complete at least 60 credit hours (transfer students: 15 credits with at least a 3.0 GPA);
- _____ Pass a Diversity course (For example: *Sociology, The Black American, etc*);
- _____ Maintain a GPA of 3.0;
- _____ Pass PRAXIS I PPST.

III. Other Requirements

- _____ Submit *Math: Pre-Methods Portfolio* on LiveText (DUE April 1 of Junior year)
- _____ Pass Praxis II Content Exam
- _____ Complete Portfolio
- _____ Obtain all required clearances! (See Appendix E.)

Check One

_____ Student is recommended for completion of the program

_____ Student is not recommended for completion of the program

Certification Advisor Signature

Date

APPENDIX E

Clearance Information

***For the latest information and updates, check the College of Education's web site:

<http://webspace.ship.edu/coleduc/>

CLEARANCE INFORMATION
Copies of ALL Clearances must be submitted to the
Office of Field Services prior to admittance in schools

Act 34 Request for Criminal Record Check

May apply online

Criminal History Request Form (SP4-164)

www.psp.state.pa.us/psp/cwp/view.asp?A=4&Q=48275

Act 151 Child Abuse History

Form available on line

Pennsylvania Child Abuse History Clearance Form (CY 113)

<http://www.dpw.state.pa.us/child/childabuseneglect/003671038.htm>

FBI Fingerprinting

All information regarding process, policy, and fingerprinting locations may be found at www.pa.cogentid.com

The applicant must register prior to going to the fingerprint site. Walk in service without prior registration will not be provided at any fingerprinting location. Registration is completed online or over the phone. Registration is available online 24 hours/day, seven days per week at www.pa.cogentid.com. Telephonic registration is available at 1-888-439-2486 Monday through Friday, 8am to 6pm EST. During the registration process, all demographic data for the applicant is collected (name, address, SSN, etc.) so there is no data entry required at the fingerprint collection site.

The applicant will pay a fee of \$40.00 for the fingerprint service and to secure the Criminal History Record. Applicants may make their payment online at www.pa.cogentid.com using a credit card or debit card. Money orders or cashiers checks payable to Cogent Systems will be accepted on site for those applicants who do not have the means to pay electronically. **No cash transactions or personal checks are allowed.**

The applicant proceeds to the fingerprint site of their choice for fingerprinting. The location of the fingerprint sites and days and hours of operation for each site will be posted on Cogent Systems' website at www.pa.cogentid.com. The location of fingerprint sites may change over time so applicants are encouraged to confirm the site location nearest to their location.

ATTENTION: Student Teachers – TB Test

State law makes it mandatory that all student teachers undergo a tuberculosis test and be adjudged free of this disease before beginning student teaching.

Our University Health Service is now prepared to administer the PPD (Mantoux) tuberculin test. This is the test now being recommended by the CDC because it is considered more reliable.

The test is applied by an intradermal injection instead of the 4 prong Tine test. Since this test requires more time to administer, the following days and times will be available to have this test done.

Monday through Wednesday 7:00 a.m.-10:00 a.m. & 4:00 p.m.-8:00 p.m.

Persons applying to student teach must either submit a currently valid clearance for tuberculosis at the Office of Field Services (356 Shippen), or be cleared by the University Physical at the Dispensary through procedures described above. All TB clearance certificates must be presented to the Office of Field Services where the results will be recorded as a permanent record; otherwise permission to student teach must be withheld.

Note that most school districts require these clearances for Level Two experiences also!