



THE UNIVERSITY *of* NORTH CAROLINA
GREENSBORO

Secondary Mathematics Teacher Licensure Handbook

Department of Mathematics and Statistics

September 2008 Edition

Students should obtain any updated versions of this document as requirements for licensure are periodically changed by the State of North Carolina.

SECONDARY MATHEMATICS TEACHER LICENSURE PROGRAM HANDBOOK

The Department of Mathematics and Statistics at UNCG offers a program leading to either a B.A. or B.S. degree in Mathematics with secondary teacher licensure (for North Carolina).

INFORMATION SOURCES

Dr. Carol E. Seaman, Program Coordinator for Secondary Licensure in Mathematics
124 Petty Building, UNCG, (336) 334-9719

The Teachers Academy Teacher Education Handbook for Undergraduates which can be downloaded from http://www.uncg.edu/ted/teach_acad_handbooks.html
and Teachers Academy information on the e-portfolio can be downloaded from http://www.uncg.edu/ted/eport_home.html

ADMISSION INTO TEACHER EDUCATION

- You must complete the form APPLICATION FOR ADMISSION TO TEACHER EDUCATION, obtained from your department advisor and return it to your advisor/program coordinator. It must have departmental approval before submission.
- You must have a GPA of 2.5 or higher and have passing scores on PRAXIS I, SAT Verbal and/or Math, or ACT to apply.
- For application approval you must have an appropriate standardized test score (SAT score* **or** ACT score **or** Praxis I **or** combinations of those**) as designated by SDPI. If you do not have the appropriate score then you must take and pass the National Teacher Examination Praxis I series. (The minimum passing scores are listed below.)

Scores Required on PRAXIS I, SAT or ACT				
<i>Candidates must earn the scores on <u>one</u> of the rows that follow:</i>				
PRAXIS I Total	PRAXIS I 522			
PRAXIS I subtest scores		Praxis I Reading score of at least 176	PRAXIS I Writing score of at least 173	PRAXIS I Mathematics score of at least 173
SAT (Verbal & Math, not Writing)	SAT Verbal and Math total of at least 1100			
SAT (Verbal & Math, not Writing) & PRAXIS I		SAT Verbal and Math total less than 1100, Verbal of at least 550	SAT Verbal and Math total less than 1100, Verbal of at least 550	PRAXIS I Mathematics score of at least 173
SAT (Verbal & Math, not Writing) & PRAXIS I		PRAXIS I Reading score of at least 176	PRAXIS I Writing score of at least 173	SAT Verbal and Math total less than 1100, Math of at least 550
ACT Composite Score	ACT Composite of at least 24 Score			
ACT & PRAXIS I		ACT Composite less than 24, English of at least 24	ACT Composite less than 24, English of at least 24	PRAXIS I Mathematics score of at least 173
ACT & PRAXIS I		PRAXIS I Reading score of at least 176	PRAXIS I Writing score of at least 173	ACT Composite less than 24, Math of at least 24

If one or more of the Praxis I series is required, the test(s) should be taken during the spring semester of the sophomore year

(if not earlier). **Copy of appropriate passing scores information must accompany the Application for Admission to Teacher Education.** For information on these tests, check with the Teachers Academy or contact the program coordinator.

- You must have the recommendation of the Department of Mathematics and Statistics.

Application for admission to Teachers Academy **should be made at the end of the sophomore year. All candidates must be admitted no later than the first semester of their junior year.** Transfer students should apply to the Teachers Academy when they are admitted to the university if they have completed General Education Courses. Transfer students who do not meet all requirements for admission to the Teachers Academy must complete at least 12 semester hours at UNCG with a GPA 2.5 or better, earn the required scores on the PRAXIS I reading, writing, and mathematics tests, and complete departmental requirements.

COLLEGE OF ARTS AND SCIENCES and UNIVERSITY GENERAL EDUCATION REQUIREMENTS

- You must complete the College of Arts and Sciences Additional Requirements as well as General Education Core required by The University. These are listed in the UNCG Undergraduate Bulletin in the section: *The College of Arts and Sciences.*

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MATHEMATICS MAJOR REQUIREMENTS

You must complete the courses required for a MATHEMATICS MAJOR - SECONDARY LICENSURE.

For a Bachelor of Arts degree, this includes: (for students entering UNCG fall 2006 or later)

MAT 191, 292, 293, 394 *Calculus I, II, III, IV*

MAT 390 *Ordinary Differential Equations*

MAT 310 *Matrix Theory*

MAT 311 *Modern Algebra (WI)*

MAT 395 *Introduction to Mathematical Analysis*

MAT 5xx (selected from approved list)

CSC 130 *Introduction to Computer Science* or **CSC 230** *Elementary Data Structures and Algorithms*

STA 290 *Introduction to Probability & Statistical Inference* **MAT 490** *Senior Seminar (SI, 1 credit)*

MAT 505 *Foundations of Mathematics for Teachers* (prerequisite MAT 292)

MAT 504 *Foundations of Geometry for Teachers* (prerequisite MAT 292)

MAT 513 *Historical Development of Mathematics* (prerequisite MAT 292)

For a **Bachelor of Science** degree, you must also choose a concentration track; therefore, you must complete the requirements for the chosen concentration for a B.S. degree as well as incorporating the above requirements.

PROFESSIONAL EDUCATION REQUIREMENTS

You must complete the courses required for Professional Education and licensure.

LIS 120 *Intro. to Electronic Info. Resources*

CUI 545 *Diverse Learners*

HEA 201 *Personal Health*

CUI 535 *Literacy in the Content Area*

ELC 381 *The Institution of Education*

CUI 557 *Teaching Practices and Curriculum in Mathematics*

CUI 450 *Psychological Foundations of Education*

CUI 465 *Student Teaching and Seminar: Secondary School*

PLANNING

It is essential that you plan your program course work carefully. Therefore a tentative individual course of study will be written for you during your first meeting with your program coordinator or mathematics education advisor. This first meeting should occur no later than fall semester of your freshman year or as soon as secondary mathematics education becomes your educational goal. The last page of this handbook has a basic plan of study for the professional courses. Here are some considerations:

1. CUI 465, Student Teaching and Seminar, requires an entire semester, usually the last semester of the senior year. It is offered **ONLY** in the spring semester and no other courses may be taken during the student teaching semester. You must complete all CUI and ELC courses **PRIOR** to student teaching.
2. CUI 557, Teaching Practices and Curriculum in Mathematics, is taught only in fall semester and must be taken the semester before student teaching. (Also see #3 below.)
3. CUI 545 (spring only), CUI 557, CUI 465 form a three-semester sequential sequence which must be taken in that manner. CUI 545 has a minimum 30 hour internship in addition to the 3 hours of class meetings per week. CUI 557 also has an internship (minimum of 50 hours) in addition to the 3 hours of class meetings per week.
4. MAT 504 and MAT 505 must be taken **PRIOR** to student teaching. MAT 504 is taught only in the fall semester and MAT 505 is taught only in the spring semester.
5. MAT 513 is taught only in the fall semester and may be taken after student teaching if approved by the coordinator.

APPLICATION TO STUDENT TEACHING

You must complete an application for student teaching before **February 15** in the year **PRIOR** to the year student teaching is to be done. You must be accepted into Teachers Academy in the second semester of your sophomore year or the first semester of your junior year. In exceptional cases, students may apply to the Teachers Academy later, but they may not student teach unless they are admitted no later than the last day of drop/add in the semester preceding the student teaching semester. Applications are available from the Teachers Academy, 319 Curry Building, as well as from your program coordinator/advisor.

REQUIREMENTS FOR STUDENT TEACHING

1. Previously admitted into Undergraduate Teacher Education Program. (**There must be a full semester between admission to the Teachers Academy and the semester in which a student is enrolled in CUI 465.**)
2. Grade point average of at least 2.5.
3. Approval from the Department of Mathematics and Statistics.

TEACHING PORTFOLIO and TECHNOLOGY STANDARDS (NETS-T)

You must create a teaching portfolio (produced electronically via TaskStream) demonstrating your growth and learning in the teacher education program. This portfolio **MUST** address the teaching standards as well as **technology competencies**. The course LIS 120 initiates you to the technology standards which you must address and to the design of this portfolio. Work on compiling the portfolio within TaskStream should *commence no later than the second week of the fall semester* the candidate is enrolled in CUI 557 and technology related submissions should be completed by March 15 of the student teaching semester at which time a team of evaluators will review your portfolio and rate it as demonstrating your satisfactorily meeting the technology competencies or will return it for improvements/revisions and **one** resubmission. *Satisfactory demonstration of technology competency is required by The State for licensure.* The teaching portfolio submission deadlines are in chart on last page. Please contact your program coordinator and the CUI 557/CUI 465 instructor for more details. (TaskStream fees are accessed after you are accepted into Teachers Academy and are for two years of TaskStream use.)

CONCEPTUAL FRAMEWORK, TEACHER GROWTH AND ASSESSMENT PROFILE, and CANDIDATE DISPOSITION ASSESSMENT PROCESS

You will be rated on Dispositions outlined in the Candidate Dispositions Assessment Profile (CDAP) in UNCG Teachers Academy Conceptual Framework during your residency in Teachers Academy. Also your growth as a teacher (via Teacher Growth and Assessment for Pre-service or TGAP) will be rated and evaluations of these items in CUI 557 and CUI 465 will be loaded in TaskStream. Copies of the Critical Framework, TGAP rubric, and CDAP rubric can be downloaded from the Teachers Academy Teacher Education Handbook.

NATIONAL TEACHER EXAMINATION Praxis II

A student seeking licensure who completes an approved UG licensure program in NC is not required to take **PRAXIS II**

Specialty Area (Mathematics) for licensure in North Carolina. However, taking it is *highly recommended* by the Mathematics Department. If you need licensure in another state, that state may require Praxis II. Passing Praxis II is also one of the avenues for an initial licensure teacher to upgrade the license. (We recommend taking Praxis II in April or June of senior year because it is a point at which most recent exposure to Praxis II material has occurred.) The NC minimum passing score for secondary mathematics licensure is a combined score (Content Knowledge score & Pedagogy score) of 281 on PRAXIS II Specialty Area Math. Other states may have different passing criteria. For further information, contact your program coordinator. You may sign up to take the PRAXIS II at <http://www.ets.org>.

APPLICATION FOR LICENSURE

To be licensed you need to apply, a few weeks before graduation, for licensure. Fee (accessed by DPI) will be remitted with completed application to Teachers Academy (319 Curry Building) which sends complete application packet to DPI. For detailed information on this application process see the Teachers Academy Handbook for Undergraduates found online at http://www.uncg.edu/soe/newsite/teachers_academy/index.html.

EMPLOYMENT

Career Services Center, #1 EUC, (336) 334-5454, will assist you in obtaining a teaching position by maintaining a file for letters of recommendation (minimum of three) and helping you prepare for job interviews. Register with CSC for these services.

Basic Plan of Study for Secondary Mathematics Program	
Freshman Year	
HEA 201 Personal Health (either semester)	
Sophomore Year	
Fall ELC 381 The Institution of Education (save materials for portfolio submission) LIS 120 Introduction to Electronic Info. Resources	Spring CUI 450 Psychological Foundations of Education (and ELC 381 or LIS 120 if not taken in fall) (save materials for portfolio submission) Take Praxis I if SAT score is not greater or equal to 1100. Apply for admission (mid April) to TEACHERS ACADEMY if Praxis I or SAT score is appropriate and GPA is at least 2.5.
Junior Year	
Fall CUI 535 Literacy in the Content Area (save materials for portfolio submission) MAT 504 Foundations of Geometry for Teachers First of semester: Apply for teacher education program if have not and you meet criteria.	Spring MAT 505 Foundations of Mathematics for Teachers CUI 545 Diverse Learners ** (save materials for portfolio submission) By February 15 Apply for Student Teaching for the following year
Senior Year	
Fall <i>Begin by August 31 TaskStream submissions</i> MAT 513 History of Mathematics CUI 557 Methods and Practices: Secondary Mathematics ** <i>(If student is not admitted to Teacher Education Program before the start of this semester then student can not enroll in CUI 557 nor CUI 465)</i> <i>By December 1 all CUI 557 related items submitted in TaskStream</i>	Spring <ul style="list-style-type: none"> All course (excluding 465) portfolio submissions due by January 15 CUI 465 (Student Teaching)** Technology submissions completed by March 15 Completed portfolio submitted for evaluation by April 20 Recommend: Take Praxis II in April if not already
<i>**CUI 545, CUI 557, CUI 465 must be taken as a 3 semester sequence</i>	

Notes on mathematics requirements:

- Each of MAT 293, 310, 390, 505, 504, 513, & STA 290 have a prerequisite of MAT 292 (Calculus II).
- Prerequisite for MAT 311 is a minimum grade of C in MAT 310.

A Basic Plan of Study for Mathematics Course Sequencing (assuming placement in MAT 151)		
	Fall Semester	Spring Semester
Freshman Year	MAT 151	MAT 191 and CSC 130
Sophomore Year	MAT 292	MAT 293 and MAT 310 and STA 290 (or MAT 390)
Junior Year	MAT 394 and MAT 311 and MAT 504	MAT 505 and MAT 390 (or MAT 290) and MAT 5XX
Senior Year	MAT 513 and MAT 395 and MAT 490	(no math classes...student teaching)