# B.S. in Mathematics with Certification Grades 7-12

# Student Handbook 2024-2025

## An overview of the four gates

Southern Connecticut State University

Revised by Dr. Younhee Lee Certification Coordinator <u>Leey6@southernct.edu</u> (203) 392-6142 Mathematics Department

## PREFACE

This handbook has been created for *you*, the candidate majoring in mathematics and pursuing teaching certification in grades 7 - 12. It contains information you will need to successfully complete your program. Please keep this handbook in a convenient place. It should be used as a reference to guide you through your program at SCSU. However, please remember to always consult with your advisor or the Mathematics Department Certification Coordinator if you have questions.

We wish you the best of success in your studies, and in your future teaching!

## **TABLE OF CONTENTS**

THE FOUR GATES: AN OVERVIEW	4
GATE 1: ENTRY INTO THE PROGRAM	5
Course Requirements	5
Fingerprinting and Background Check	5
GPA Requirements	5
PRAXIS Core Exam, SAT, or ACT	5
The Admission Essay	5
The Department Interview	6
Applying to the College of Education	6
GATE 2: MIDPOINT EVALUATION IN THE PROGRAM	7
Course Requirements	7
GPA Requirements	7
GATE 3: PRE-STUDENT TEACHING IN THE PROGRAM	8
Course Requirements	8
GPA Requirements	8
Applying for Student Teaching	8
PRAXIS II	8
SCSU Online Modules	8
SCSU Math Certification Readiness Exam – Online Exam	9
GATE 4: COMPLETION OF THE PROGRAM 1	0
Course Requirements 1	0
GPA Requirements 1	0
Completing the Program 1	0
edTPA Assessment	0
Getting Certified 1	0
Appendix A: Checklist For Gate 1 1	1
Appendix B: Checklist For Gate 2 1	12
Appendix C: Checklist For Gate 3 1	3
Appendix D: Checklist For Gate 4 1	4
Appendix E: Four-Year Curriculum MAP* (BS Math + Certification) 1	5

## THE FOUR GATES: AN OVERVIEW

Each certification candidate, regardless of a subject area, must pass through a set of four gates to complete his/her certification program. Every department has developed its own set of gates for its certification candidates.

In mathematics, the four gates consist of:

- 1. Entry into the certification program
- 2. Midpoint evaluation in the program
- 3. Pre-student teaching evaluation in the program
- 4. Completion of the program

In addition, a Mathematics GPA (MAT GPA) will be calculated. Note that for certification candidates, the MAT GPA is calculated using MAT 150 and all required MAT courses in the major that count towards graduation. (When computing the MAT GPA, only one grade replacement will be dropped). This MAT GPA will be calculated by the Mathematics Certification Coordinator and, in most cases, will not match the candidate's overall GPA.

In this Handbook, we will explain each of the four gates in detail.

<u>*Reminder*</u>: Always consult with your advisor or the Mathematics Department Certification Coordinator if you have questions.

## GATE 1: ENTRY INTO THE PROGRAM

In Gate 1, candidates apply to the College of Education. This application is required for any candidate wishing to become certified in any subject.

The following competencies must be met before a candidate can apply to the College of Education and complete this gate (a checklist for Gate 1 is in Appendix A):

#### **Course Requirements**

Each candidate must complete MAT 150 (*Calculus I*), and MAT 151 (*Calculus II*) with grades of C+ or higher in each course. Each student must pass EDU 200 (*Teachers, Schools and Society*).

In those MAT courses which the student applies toward the major, he/she must have a minimum GPA of 2.3, no grade below a 'C-', and in at least 50% of the courses must have a grade of 'B-' or better. Note that for certification candidates, MAT GPA is calculated using any mathematics MAT 150 and above required for the B.S. Mathematics 7 - 12 major.

#### Fingerprinting and Background Check

Each school/school district placing students for observation, field experience, practicum, internship, or any school-based placement will determine their own background check/fingerprinting requirement. More information regarding background checks will be provided by the College of Education.

#### **GPA Requirements**

Each candidate must have a minimum of 2.7 GPA (grade point average) at the time of application to the College of Education. This GPA includes course work taken at other universities. Hence, if a candidate has transferred in courses from other universities and the *overall* GPA from those universities and SCSU is below 2.7, the candidate is not eligible to pass through Gate 1, and therefore cannot apply to the College of Education. The candidate must also maintain a Math GPA  $\geq 2.3$  in mathematics courses in the major that count toward graduation.

#### PRAXIS Core Exam, SAT, or ACT

All candidates must take the Praxis Core, SAT or ACT to satisfy the State Board of Education competency examination requirement. Candidates who do not achieve a satisfactory score on Praxis Core, SAT, ACT, or GRE will be required to participate in remediation that conforms to forthcoming guidelines.

Note that while the PRAXIS Core exam no longer has a minimum score, the university is required to address deficiencies in students with low test scores. The Certification Coordinator will contact you if you fall in that category.

#### The Admission Essay

Each candidate must submit an essay in response to the prompt provided by the College of Education. The essay is submitted electronically on the application website. The website link will be emailed to you during the application seasons (around early October and early March of each academic year). Details about the requirements of the essay are below:

**<u>Prompt</u>**: In a concise and carefully crafted essay, explain why you want to become a teacher and discuss two to three qualities of a good teacher. Provide support for each of these qualities by explaining how they affect student learning.

The essay must be typed using Times New Roman or similar font, 12-point, single-spaced, and two pages long (approximately 1000 words). The essay serves as a writing sample, so it is important to submit a carefully reviewed, coherent paper.

#### The Department Interview

Each candidate must pass an interview with the Mathematics Department Certification Coordinator and one member of the Mathematics Department. The interview will only be scheduled once you have submitted your essay and *PRAXIS Core* (or equivalent results). The interview will usually not last more than 30 minutes.

This may be our first chance to get to know you better. Here are some tips to help you with the interview:

- Review your essay before the interview, since you may be asked to respond to various parts of it.
- Dress appropriately for your interview. Casual clothing is acceptable, but remember: you want to create a good impression.
- Arrive on time for your interview. If you need to cancel the interview for any reason, let us know as soon as possible via email.

Feel free to ask questions during the interview and stay relaxed. We are here to help you.

Upon completion of the interview, each candidate will be advised to continue with the program, advised to continue with conditions, or advised to withdraw from the program.

#### Applying to the College of Education

If you are advised to continue with the program or continue with conditions, your interview results will be uploaded to your application website. The College of Education then reviews your completed application and takes the final decision on whether or not you are accepted in the Teacher Certification Program. You will be notified of the College of Education's decision shortly after the application is complete. If accepted, this will complete Gate 1.

Important Note: Due to Connecticut State Department of Education requirements, students applying for certification programs *must not register for more than two courses in professional education* before they have received official notification of admission as a candidate to the certification program. (Professional courses include EDU 200, SED 225 (or SED 482), EDU 316, EDU 413; RDG 470; and EDU 471). *Failure to comply with this policy may result in your application to the College of Education being denied.* 

## GATE 2: MIDPOINT EVALUATION IN THE PROGRAM

In Gate 2, candidates' progress in the program is assessed during a follow up meeting with the certification coordinator or during the registration period. The following competencies must be met before a candidate can complete this gate (a checklist for Gate 2 is in Appendix B):

#### **Course Requirements**

Candidates must complete MAT 250 - Foundations of Mathematics, MAT 252 - Calculus III, MAT 372 - Linear Algebra, and EDU 316 - Psychology for the Educator.

Candidates are not allowed any grade below C- in any math course that counts toward their majors. Candidates must earn a grade of B- or better on at least 50% of their math course grades that count toward their major.

#### **GPA Requirements**

Candidates are required to maintain a general GPA  $\ge$  2.7 and a Math GPA  $\ge$  2.3 in mathematics courses in the major that count toward graduation.

## GATE 3: PRE-STUDENT TEACHING IN THE PROGRAM

In Gate 3, candidates apply for student teaching. This needs to take place in the spring semester prior to student teaching, which will take place the following spring.

The following competencies must be met before or during the last fall semester prior to student teaching. Otherwise, the candidate will not be allowed to student teach (a checklist for Gate 3 is in Appendix C):

#### **Course Requirements**

All required courses, besides MAT 494 – Student Teaching (Mathematics) and MAT 496 – Student Teaching Seminar (Mathematics) must be completed prior to the spring semester in which you will be student teaching.

No student will be allowed to student teach if they have not completed all required coursework, and no student will be allowed to take any course other than MAT 496, *Service Learning for Mathematics Education*, while student teaching.

Candidates are not allowed any grade below C- in any math course that counts toward their majors. Candidates must earn a grade of B- or better on at least 50% of their math course grades that count toward their major.

#### **GPA Requirements**

Candidates are required to maintain a general GPA  $\ge$  2.7 and a Math GPA  $\ge$  2.3 in mathematics courses in the major that count toward graduation.

## Applying for Student Teaching

You will get an email from the College of Education about the application for student teaching in the spring semester prior to student teaching, which will take place the following spring. Each candidate will then be notified once a placement has been made.

#### PRAXIS II

Each candidate is encouraged to pass PRAXIS II prior to student teaching. This is a state required content examination for certification. This exam cannot be waived. In mathematics, the required exam is 5165. Information on registering for this exam can be found at https://origin-www.ets.org/praxis/prepare/materials/5165

#### **SCSU Online Modules**

Each candidate must take two online modules: (1) Behavioral Difficulties (Social and Emotional Development), (2) Dyslexia, and (3) the Computational Thinking. These modules will be available on Blackboard. Ask the Certification Coordinator for more information when it is time to take them.

#### SCSU Math Certification Readiness Exam – Online Exam

Each candidate must achieve a score on each of the four modules of the Readiness Exam at the Target or Acceptable level. Each question on the exam receives a score of 3 (Target), 2 (Acceptable), or 1 (Unacceptable). To receive an overall score of Target on a module, the candidate must have an average of 2.6 or higher. To receive an overall score of Acceptable on a module, the candidate must have an average greater than or equal to 2.0 and less than 2.6. An overall average below 2.0 is considered Unacceptable. Candidates may retake any module two times, each time after a waiting period of 30 days. The candidate must receive permission from the Certification Coordinator to retake the exam after that.

## GATE 4: COMPLETION OF THE PROGRAM

In Gate 4, candidates complete Student Teaching and are ready to apply for certification.

The following competencies must be met before a candidate can apply for certification and complete this gate (a checklist for Gate 4 is in Appendix D):

#### **Course Requirements**

Each candidate must pass MAT 494, *Student Teaching (Mathematics)*, and MAT 496, *Student Teaching Seminar (Mathematics)*.

#### **GPA Requirements**

Candidates are required to maintain a general GPA  $\ge$  2.7 and a Math GPA  $\ge$  2.3 in mathematics courses in the major that count toward graduation.

#### Completing the Program

Upon completion of all the requirements for Gate 4, the candidate has completed the program, and is now eligible to graduate and apply for certification.

#### edTPA Assessment

Candidates must take and pass edTPA, a state mandated assessment. This assessment is completed during student teaching and is connected to the MAT 496 portfolio required.

#### **Getting Certified**

Candidates must apply for certification. An Application for Certification form can be obtained in the Student Teaching Office in Davis Hall. The completed form must be given to the Certification Officer in Davis Hall.

## **APPENDIX A: CHECKLIST FOR GATE 1**

Complete MAT 150 and MAT 151 each with a C+ or better.

Complete fingerprinting and background check.

Complete EDU 200.

Take either the PRAXIS Core, SAT, or ACT exam and any related remediation.

Have an overall GPA  $\geq$  2.7 in all courses, including courses taken at other universities.

Submit your online application essay.

Pass an interview with the Mathematics Department Certification Program Coordinator and one member of the Mathematics Department.

## APPENDIX B: CHECKLIST FOR GATE 2

Complete MAT 250, MAT 252, and MAT 372 in the major program with a C<sup>-</sup> or better.

Maintain an overall GPA  $\geq 2.3$  in mathematics courses in the major that count toward graduation.

Maintain an overall GPA  $\geq 2.7$  in all courses, including courses taken at other universities.

Candidates must have a grade of B- or better on at least 50% of their math course grades that count toward their major.

Complete EDU 316.

## **APPENDIX C: CHECKLIST FOR GATE 3**

Complete all required mathematics courses in the major program.

Maintain an overall GPA  $\geq 2.3$  in mathematics courses in the major that count toward graduation.

Maintain an overall GPA  $\geq 2.7$  in all courses, including courses taken at other universities.

Candidates must have a grade of B- or better on at least 50% of their math course grades that count toward their major.

Complete MAT 490 and MAT 408.

Complete EDU 413, EDU 471, RDG 470, SED 225 (or SED 482), SHE 203, any other state-required professional courses, and all university requirements.

Complete the Application for Student Teaching.

Pass PRAXIS II.

Complete the three online modules on Blackboard.

Pass each of the 4 modules in the online Mathematics Readiness Exam with a score of Target or Acceptable.

## **APPENDIX D: CHECKLIST FOR GATE 4**

Pass MAT 494 and MAT 496.

Maintain an overall GPA  $\ge 2.3$  in mathematics courses in the major that count toward graduation and 50% of math course with a grade of B- or better.

Maintain an overall GPA  $\geq 2.7$  in all courses, including courses taken at other universities.

Apply to the State of Connecticut for an Initial Educator's Certificate.

Freshmen Fall	Freshmen Spring
T1FY: INQ 101	T1WC: ENG 112
T1CT: Critical Thinking	T1QR: MAT 150 (4CR)
T1TF: Tech Fluency	T2CD: MAT 260 - Geometry and the Arts (Recommended)
Elective Course	Elective Course
Elective Course	T2MB: SHE 203
Praxis Core exam or receive waiver from state.	Prepare Application to CoE
Fingerprinting and background check prior to Field placement	
Sophomore Fall	Sophomore Spring
T2CC: EDU 200	T2AE: HIS 110 or 111
T1MC: Multilingual Communication (200 level)	T2NW1: Natural World 1
MAT 151: Calculus II (4CR)	CSC 152: Computer Programming
MAT 372: Linear Algebra	MAT 250: Foundations of Mathematics (4 CR)
MAT 300(W): History of Math	MAT 252: Calculus III (4 CR)
Field Placement in EDU 200	Students gain formal admission to the Program.
Junior Fall	Junior Spring
T2NW2: Natural World 2	EDU 413: Secondary Education
T2 one of TP/GA/CE: (Time and Place/Global Awareness/ Cultural Expression)	EDU 316: Child Development and Psychology
T2 one of TP/GA/CE: (Time and Place/Global Awareness/ Cultural Expression)	MAT 408: Technology for Teaching Secondary School Mathematics
MAT 375: Abstract Algebra	MAT 360: Foundations of Geometry
MAT 221: Intermediate Applied Statistics (4 CR)	MAT 378: Discrete Mathematics
Pass Praxis II Exam	Field Placement in EDU 413 & MAT 408
Senior Fall	Senior Spring
RDG 470: Literacy in the Classroom	MAT 494: Student Teaching
EDU 471: English Language Learners in the Classroom	MAT 496: Student Teaching Seminar (T3)
SED 225 (old SED 482)	
MAT 490: Teaching Mathematics for the Secondary School	
MAT 405: Elem. Mathematics from an Advanced Standpoint	
Field Placement in MAT 490	

## APPENDIX E: FOUR-YEAR CURRICULUM MAP\* (BS MATH + CERTIFICATION)

\*Map doesn't replace degree evaluation

\*\* Total number of elective credits = 8. Number of elective courses depends on the number of credits \*\*\*Two W-courses (in addition to MAT 300W) are also required. Students should try to choose LEP-T2 courses that are also W-courses.