

BACHELOR OF SCIENCE IN MATHEMATICS - OPTION IN MATHEMATICS EDUCATION

CORE COURSES

LOWER DIVISION MATHEMATICS COURSES

MATH 122 – Calculus I (4 Units)

MATH 123 – Calculus II (4 Units)

MATH 224 – Calculus III (4 Units)

MATH 233 – Fundamental Concepts of Advanced Mathematics (3 Units)

MATH 247 – Introduction to Linear Algebra (3 Units)

UPPER DIVISION MATHEMATICS COURSES

MATH 310 – History of Early Mathematics (3 Units)

MATH 341 – Number Theory (3 Units)

MATH 355 – College Geometry (3 Units)

MATH 380 – Probability and Statistics (3 Units)

MATH 410 – History of Modern Mathematics (3 Units)

MATH 444 – Introduction to Abstract Algebra (3 Units)

UPPER DIVISION STATISTICS COURSES

STAT 381 – Mathematical Statistics (3 Units)

UPPER DIVISION MATHEMATICS EDUCATION COURSES

MTED 301 – Computer Applications in Mathematics for Teachers (3 Units)

MTED 411 - Topics and Issues in Secondary School Mathematics (3 Units)

UPPER DIVISION SINGLE SUBJECT EDUCATION COURSES

EDSS 300M – Introduction to Teaching – Mathematics (3 Units)

TAKE ONE FROM EACH OF THESE SETS

ENGLISH

ENGL 300 – Advanced Composition (3 Units)

ENGL 317 – Technical Communication (3 Units)

MATHEMATICS¹

MATH 361A – Introduction to Mathematical Analysis (3 Units)

MATH 364A – Ordinary Differential Equations I (3 Units)

CHOOSE ONE OF THE THREE SEQUENCES

PHYSICS SEQUENCE

PHYS 151 – Mechanics and Heat (4 Units)

PHYS 152 – Electricity and Magnetism (4 Units)

PHILOSOPHY SEQUENCE

PHIL 170 – Critical Reasoning (3 Units)

PHIL 270 – Symbolic Logic I (3 Units)

LINGUISTIC SEQUENCE

Take 8 Units of a foreign language.

ADDITIONAL REQUIREMENT

Take 3 additional Upper Division Mathematics Units not from:

- MATH 303
- MATH 309
- MATH 370A
- MATH 370B
- MATH 409

¹ Note that you can use the one you don't choose of these to satisfy the "Additional Requirement."

SINGLE SUBJECT CREDENTIAL PROGRAM - MATHEMATICS

SUBJECT MATTER COMPETENCE

PRIMARY COMPETENCE DEMONSTRATION

Shown by:

- 1) having a 2.75 or higher GPA in required MATH, MTED, and STAT courses²
- 2) having no grade lower than a C in any of the required MATH, MTED, and STAT courses

ADDITIONAL COMPETENCE DEMONSTRATION

Prospective Mathematics Teachers are required to complete 45 hours of professional preparation in the Single Subject Credential Program (this includes Student Teaching).³

ADMISSION PROCEDURES

“Application to the Single Subject Credential Program is embedded in the prerequisite course (EDSS 300[M]). Candidates compile and submit their program application packets to their EDSS 300 instructor at the end of the semester. The EDSS 300 instructor will review the applications with the Subject Area Coordinator and submit them to the Single Subject Office for processing at the end of the term. The program application is part of the EDSS 300 course packet that you will purchase from the bookstore the semester you take EDSS 300. After acceptance to the program, candidates may take any remaining co-requisites and core courses. Candidates will complete one semester of student teaching after all course work is completed.”

SSCP STATUS

“A single subject mathematics credential authorizes the holder to teach the mathematics in departmentalized schools (generally, this means middle & high schools). You can obtain either a Mathematics or Foundational Level Mathematics Credential through CSULB's Single Subject Credential Program (SSCP) ... In order to obtain a Single Subject Credential in mathematics, you will need to demonstrate Subject Matter Competence (SMC).”

² For a guide by the College of Natural Sciences and Mathematics Department of Mathematics and Statistics check here: <http://web.csulb.edu/~jchesler/sscp/GPAWorksheet.pdf>

³ This is done during EDSS 300M.

ADMISSION REQUIREMENTS

- 1) Complete EDSS 300M with a B or higher
- 2) Complete the 45-hour fieldwork required by EDSS 300M in a satisfactory manner
- 3) Attain either:
 - a. 2.67 or higher GPA from all baccalaureate and post baccalaureate courses
 - b. 2.75 or higher GPA from the last 60 semester units (90 if quarter units used)
- 4) Complete an interview with an approved program faculty (required by EDSS 300M)
- 5) Submit two recommendation forms⁴ (required by EDSS 300M)
- 6) Submit a written statement of professional goals and philosophy of education (required by EDSS 300M)
- 7) Submit proof of:
 - a. Certificate of Clearance⁵
 - b. 30-Day Sub Permit
 - c. Either⁶
 - i. Activity Supervisor Permit
 - ii. Child Development Permit
 - d. Either
 - i. Negative Tuberculosis Skin Test (must've been taken within 4 years of application)
 - ii. Chest X-Ray (must've been taken within 8 years of application)
 - e. Basic Skills Requirement⁷
- 8) Attend a mandatory SSCP Orientation⁸
- 9) Submit a completed Program Application to the EDSS 300M instructor (required by EDSS 300M)

ADVANCEMENT INTO STUDENT TEACHING

Refer to the SSCP Student Teaching Handbook⁹ and the SSCP webpages on Student Teaching¹⁰ produced by California State University, Long Beach.

⁴ Forms found here: <http://www.ced.csulb.edu/documents/applicant-recommendation-form>

⁵ Instructions found here: <http://www.ced.csulb.edu/single-subject/certificate-clearance-instructions>

⁶ Both are issued by the Commission on Teacher Credentialing (CTC)

⁷ Criterion found here: <http://www.ced.csulb.edu/single-subject/basic-skills-requirement>

⁸ Orientation dates found here: <https://www.ced.csulb.edu/programs/single-subject-credential-program/program-presentations-edss-300-classes>

⁹ https://www.ced.csulb.edu/sites/default/files/documents/sscp-st-handbook-f17_2017-08-09.pdf

¹⁰ <https://www.ced.csulb.edu/programs/single-subject-credential-program/student-teaching>

REFERENCES

- Chesler, J. "GPA for Subject Matter Competence."
<http://web.csulb.edu/~jchesler/sscp/GPAWorksheet.pdf>.
- "Documents & Forms." *Documents & Forms | College of Education, California State University, Long Beach*, www.ced.csulb.edu/single-subject/documents-forms.
- "Mathematics and Statistics: Bachelor of Science in Mathematics - Option in Mathematics Education (120 Units)." *California State University, Long Beach, California State University, Long Beach*, web.csulb.edu/divisions/aa/catalog/current/cnsm/mathematics/mathbs03_single_subject_mathematics.html.
- "Mathematics and Statistics." *California State University, Long Beach, California State University, Long Beach*, <http://web.csulb.edu/divisions/aa/catalog/current/cnsm/mathematics>.
- "Program Policies." *Program Policies | College of Education, California State University, Long Beach*, www.ced.csulb.edu/programs/single-subject-credential-program/program-policies.
- "Single Subject Credential in Mathematics." *Single Subject Credential in Mathematics | Department of Mathematics and Statistics, California State University, Long Beach*, <http://web.csulb.edu/depts/math/?q=node%2F13>.
- "Single Subject Credential Program Overview." *Single Subject Credential Program Overview | College of Education, California State University, Long Beach*, www.ced.csulb.edu/programs/single-subject-credential-program/courses-program.
- "Single Subject Credential Program (SSCP)." *Single Subject Credential Program (SSCP) | College of Education, California State University, Long Beach*, www.ced.csulb.edu/single-subject.
- "Single Subject Math." *Single Subject Math | College of Education, California State University, Long Beach*, www.ced.csulb.edu/programs/single-subject-math.
- "SSCP Student Teaching." *SSCP Student Teaching | College of Education, California State University, Long Beach*, www.ced.csulb.edu/programs/single-subject-credential-program/student-teaching.
- "Subject Matter Competency." *Subject Matter Competency | College of Education, California State University, Long Beach*, www.ced.csulb.edu/programs/single-subject-credential-program/cset.