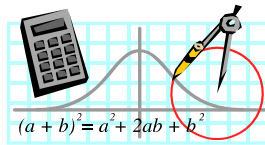


California State University, San Bernardino

**B. A. in Mathematics
Integrated Teaching Track
(BAITT)**

Program Information



**Mathematics Department
Jack Brown Hall- JB 370
Phone: (909) 537-5361
www.math.csusb.edu**



**Teacher Education Office
College of Education- CE 102
Phone: (909) 537-5650
<http://www.csusb.edu/coe/>**



**BATT/BAITT Mathematics Coordinator:
Dr. Laura Wallace
email: wallace@csusb.edu**



**B. A. in Mathematics
Integrated Teaching Track
(BAITT)**

Program Information Contents

This packet of information includes the following handouts:

1. Preparing to Teach Mathematics at the Secondary Level
(see Option 2)
2. Course Requirements
3. BATT/BAITT Math Course Flowchart
4. Timeline
5. PAF Checklist
6. Sample Degree Plan for Freshmen
7. Sample Degree Plan for Transfers
8. My Sample Degree Plan (to be filled in by student/advisor)
9. Department Approval Form for Completion of Lower Division Requirements and Satisfactory G.P.A.
10. Department Approval Form for Demonstration of Subject Matter Competency (80% of mathematics units applicable to the BAITT degree)

**Preparing to Teach Mathematics
At the Secondary Level (Grades 7-12)**

Option 1: Single Subject Credential in Mathematics – Traditional Fifth Year Program (to teach math at any secondary grade level) As preparation for admission to the single subject credential program you need to:

1. Complete a Bachelor's Degree program.
2. Demonstrate Subject Matter Competency by:
 - a. Completing an approved Subject Matter Program in Mathematics. The B.A. in Mathematics, Teaching Track (BATT) at CSUSB is an approved program.

or

 - b. Passing the CSET exam in Mathematics.
(Note that to earn a full Single Subject Credential CSET subtests I, II, and III must be passed.)
3. Contact the Teacher Education Office regarding requirements for admission into the credential program. The C.A.S.E. office is located at CE 102.

Option 2: Single Subject Credential in Mathematics - Integrated Program (to teach math at any secondary grade level) The B.A. in Mathematics, Integrated Teaching Track (BAITT) allows students to complete their degree and credential within 4 years. As preparation for admission into this program, see the BAITT Timeline in the BAITT Informational Packet available in the Mathematics Department (JB 370).

Option 3: Foundational Level Credential in Mathematics (to teach math up through Algebra II) As preparation for admission to the single subject credential program you need to:

1. Complete a Bachelor's Degree program.
2. Demonstrate Subject Matter Competency by passing CSET subtests I and II.
Notes: a) This only allows one to teach up through Algebra II.
b) If you complete the BATT, you earn a full waiver of the CSET as outlined in option 1.
3. Contact the Teacher Education Office regarding requirements for admission into the credential program. The C.A.S.E. office is located at CE 102.

Option 4: Subject Matter Authorization in Mathematics (to teach math up through 9th grade level) To qualify for this program you must:

1. Possess a California Teaching Credential in any field (including Multiple Subjects).
2. Complete a CTC approved program of 48 quarter units in mathematics. (See the website <http://www.ctc.ca.gov/credentials/leaflets/c1852.html>).

California State University, San Bernardino
B.A. IN MATHEMATICS - Integrated Teaching Track (BAITT)
Course Requirements (2009-2010 Bulletin)

This program allows prospective single-subject teachers the opportunity to earn their Bachelor of Arts in Mathematics and Single Subject Credential concurrently. A full-time student can expect to complete the program within four years (see BAITT Sample Degree Plans). Students in this program must be accepted into the Single Subject Teaching Credential Program prior to enrolling in education courses. Refer to the BA Integrated Teaching Track (BAITT) Timeline.

Total Units Required for Graduation: 203 units

Mathematics Required Courses (77 units)

1. MATH 199. Technology in Math Education through Problem Solving (3)
2. MATH 211. Basic Concepts of Calculus (4)
3. MATH 212. Calculus II (4)
4. MATH 213. Calculus III (4)
5. MATH 241. Problem Solving in Calculus (2)
6. MATH 251. Multivariable Calculus I (4)
7. MATH 252. Multivariable Calculus II (4)
8. MATH 329. Transformation Geometry (4)
9. MATH 331. Linear Algebra (4)
10. MATH 345. Number Theory and Proof (4)
11. MATH 355. Analysis and Proof (4)
12. MATH 372. Combinatorics (4)
13. MATH 399. Service Learning Experience in Mathematics (2)
14. MATH 465. Probability Theory (4)
15. MATH 480. Topics in History of Mathematics (4)
16. MATH 499. Mathematics in the Secondary Classroom (4)
17. MATH 529. Advanced Geometry (4)
18. MATH 545. Abstract Algebra I (4)
19. MATH 553. Analysis I (4)
20. MATH 565. Mathematical Statistics (4)
21. MATH 599. Senior Seminar for Future Mathematics Educators (2)

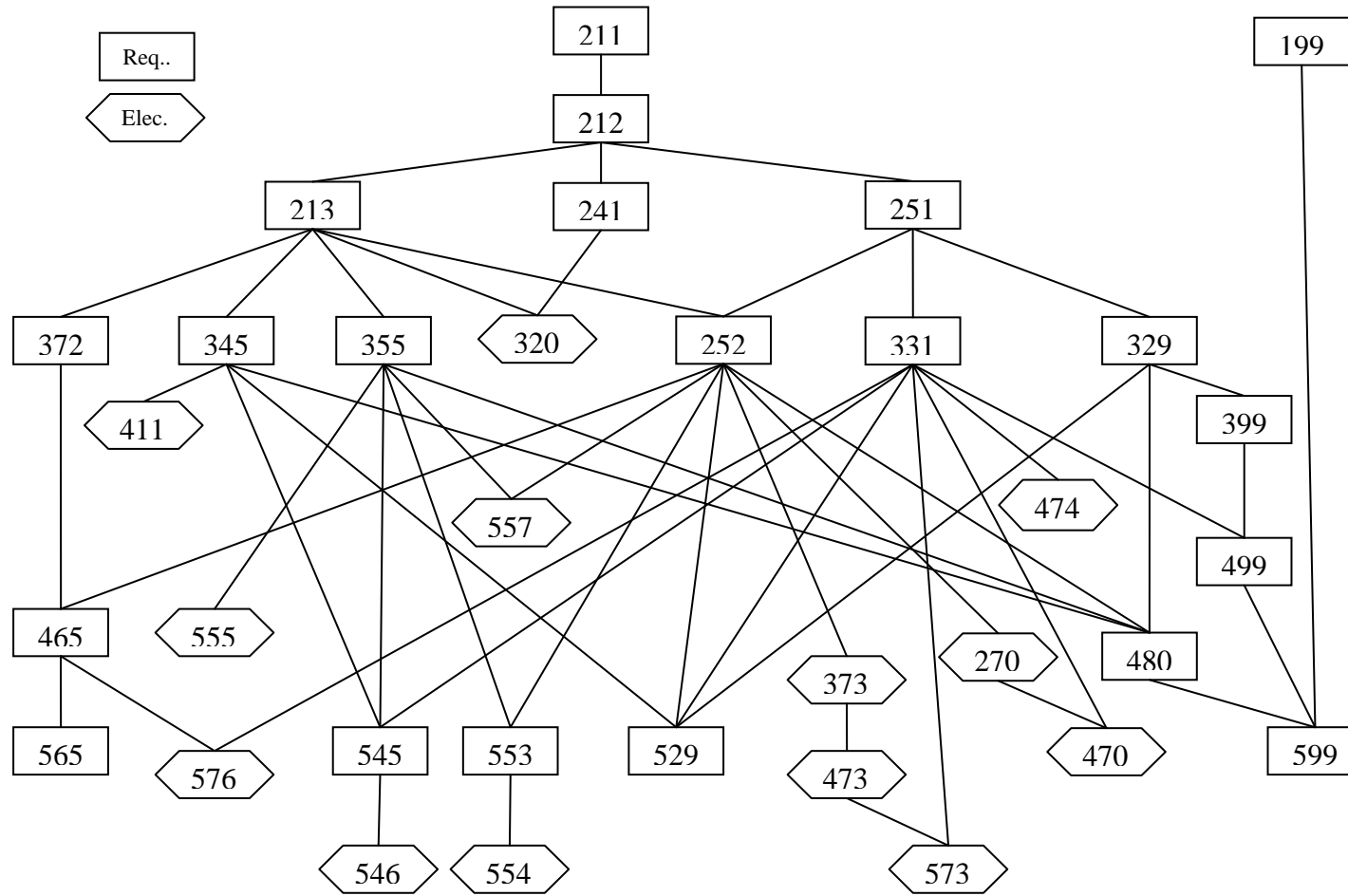
Mathematics Elective Courses (8 units)

Education Courses (44 units)

1. ESEC 405. Introduction to Secondary School Culture (4)
2. ESEC 407. Secondary School Teaching (4)
3. ESEC 410. Adolescent Development and Learning (4)
4. ESEC 413. Language Interaction in the Classroom (4)
5. ESEC 417. Educational Psychology: Instructional Theory, Assessment and Classroom Management (4)
6. ESEC 419. Literacy Across the Curriculum (4)
7. ESEC 512. Assessment Seminar: Designing Instruction (2)
8. ESEC 513. Assessment Seminar: Assessing Learning (2)
9. ESEC 514. Assessment Seminar: Culminating Teaching Experience (2)
10. ESEC 550A. Student Teaching (2)
11. ESEC 550B. Student Teaching (4)
12. ESEC 550C. Student Teaching (8)

Department of Mathematics
B.A. -Teaching Track (BATT/BAITT)
Math Course Flowchart

2008-2009 Bulletin



See Catalog for Information on 395 510 595

Course Checklist	
Required Courses (77 units)	
___	Math 199
___	Math 211
___	Math 212
___	Math 213
___	Math 241
___	Math 251
___	Math 252
___	Math 329
___	Math 331
___	Math 345
___	Math 355
___	Math 372
___	Math 399
___	Math 465
___	Math 480
___	Math 499
___	Math 529
___	Math 545
___	Math 553
___	Math 565
___	Math 599
Electives	
BATT 12 units	BAITT 8 units

BA Integrated Teaching Track (BAITT) Timeline

See the BAITT Sample Degree Plans in coordination with following this timeline.

Before your Junior Year (and entering COE Education coursework):

1. Obtain a Program Admission File Checklist (PAF) for the Single Subject Integrated Mathematics.
2. Obtain Math Department approval form for completion of lower division requirements, and have it signed by the Math Department Chair or designee.
3. Complete items 1-13 of the PAF Checklist for the BAITT. Note that this includes your Live Scan clearance.
4. As you complete each of the components on the PAF checklist, have it approved by Alice Pedersen (apederse@csusb.edu) or designee in the Teacher Education Office of the College of Education (CE 102).
5. Make an appointment with a credential advisor in the Teacher Education Office of the College of Education (CE 102) by contacting Janetha Hamre (jhamre@csusb.edu) or designee at 537-5650. Bring completed and signed PAF checklist to your appointment.
6. Complete a Program Plan with a credential advisor.

By the end of Junior Year (and before entering COE Supervision courses):

1. Complete Math 399, Service Learning Experience in Mathematics, as soon as possible but no later than Fall of your Junior year. Math 399 may be taken with beginning Education coursework with the approval of the College of Education and must be taken before entering ESEC 550A, B, C.
2. CBEST: Take the CBEST as soon as possible but no later than Spring of your Junior year. You *must* have your CBEST results before you are approved for Student Teaching. If you have passed, but do not have a score of 39 or better in the written portion of the CBEST, you must take and pass NSCI 306 before Teacher Supervision, ESEC 550A,B,C.
3. Complete CPR certification (you may do this through the College of Extended Learning or the Red Cross, Level 2)
4. Make sure you will have demonstrated competency in mathematics by completing 80% of the units in mathematics applicable to the BA Integrated Teaching Track by the time you enter ESEC 550A,B,C (see item 14 on PAF Checklist). Obtain the Math Department Approval Form and have it filled out and signed by the Math Department Chair or designee.
5. See the Director of Teacher Supervision, Cathy Provencio (cprovenc@csusb.edu), in the Teacher Supervision Office (CE 102) early in the Spring quarter, to begin the process of placement for student teaching.

Single Subject Integrated Mathematics (BAITT) PAF Checklist

Student's Name: _____ SID#: _____

Items 1-13 must be completed/checked before entering COE Education courses:

1. _____ Application for Credential Program Admission
2. _____ Two Letters of Recommendation
3. _____ Junior Status/ 90 units
4. _____ Completion of Lower Division Requirements (Math Department Approval Form)
5. _____ Grade Point Average – cumulative GPA of 2.67 or higher
6. _____ Transcripts (for transfer students only, one official copy from each institution attended except CSUSB)
7. _____ CBEST Passed with scores: _____ Reading _____ Math _____ Writing
8. _____ Verification of Negative TB Test Results
9. _____ Certificate of Clearance/Live Scan
10. _____ Service Learning – Math 399: Qtr _____ Grade _____
(Math 399 may be taken concurrently with a beginning Education course with approval by the College of Education.)
11. _____ Technology Requirement: Qtr _____ Course _____ Grade _____
12. _____ Program Plan (make an appointment with advisor in College of Teacher Education)
13. _____ \$35 Program Admission Filing Fee

Item 14 must be completed before entering COE Supervision courses:

14. _____ Subject Matter Competency – Completion of 80% of the units in mathematics applicable to the B.A. in Mathematics Integrated Teaching Track
(Math Department Approval Form)

Student's Signature _____ Date: _____

Application Received by _____ Date: _____

Distribution: White – Teacher Education Office/Single Subject Credential Coordinator

Yellow – Mathematics Department

Pink – Student

Last update: Spring 2009

Department of Mathematics, CSUSB
BAITT Sample Degree Plan
for Freshmen

Degree: BA Integrated Teaching Track				Calculus ready			Years to Degree: 4 Years			
Year	Fall	Qtrs.	Units	Winter	Qtrs.	Units	Spring	Qtrs.	Units	Yr. Total
Year 1	Math 211 (GE-A3, GE-B1)	FWS	4	Math 212	FWS	4	Math 213	FWS	4	
	GE-A1	FWS	4	Math 199	WS	3	Math 251	FS	4	
	GE-A2	FWS	4	GE-B2	FWS	5	GE-D1	FWS	4	
	GE-A4	FWS	4	GE-C1	FWS	4	GE-C2	FWS	4	
	Quarter Units:		16	Quarter Units:		16	Quarter Units:		16	48
Year 2	Math 252	FWS	4	Math 241	FWS	2	Math 345	FWS	4	
	Math 329	FWS	4	Math 331	FWS	4	Math 372	FWS	4	
	GE-D2	FWS	4	Math 399	FW	2	GE-B3	FWS	5	
	GE-C3	FWS	4	GE-C4	FWS	4	GE-D4	FWS	4	
	GE-E1	FWS	2	GE-D3	FWS	4				
	Quarter Units:		18	Quarter Units:		16	Quarter Units:		17	51
Year 3	Math 355	FWS	4	Math 480	FWS	4	Math 529	FWS	4	
	Math 465	FWS	4	Math 499	WS	4	Math Elective	FWS	4	
	GE-B4	FWS	2	Math 565	FWS	4	GE-E3	WS	2	
	GE-D5	FWS	4	GE-E2	FWS	2	ESEC 410	FWS	4	
	ESEC 405	FWS	4	ESEC 407		4	ESEC 413		4	
	Quarter Units:		18	Quarter Units:		18	Quarter Units:		18	54
Year 4	Math 553	FWS	4	Math 545	FWS	4	Math Elective	FWS	4	
	Math 599	FS	2	GE-C5	FWS	4	ESEC 513	WS	2	
	GE-B5	FWS	4	ESEC 419	WS	4	ESEC 514		2	
	ESEC 417	FW	4	ESEC 512	WS	2	ESEC 550C	FWS	8	
	ESEC 550A	FWS	2	ESEC 550B	FWS	4				
	Quarter Units:		16	Quarter Units:		18	Quarter Units:		16	50
Total Units:										203

- NOTES:**
1. Students are also required to satisfy the Upper Division Writing Requirement (GE - F) either through passage of the WREE or passage of an upper division writing course.
 2. Students can consider taking classes in summer school to lighten the course load in the regular academic year.

Department of Mathematics, CSUSB
BAITT Sample Degree Plan
for Transfer Students

Degree: BA Integrated Teaching Track

Calculus completed

Years to Degree: 3 years

	Fall	Qtrs.	Units	Winter	Qtrs.	Units	Spring	Qtrs.	Units	Yr. Total
Year 1	Math 241	FWS	2	Math 199	WS	3	Math 331	FWS	4	
	Math 329	FWS	4	Math 345	FWS	4	Math 372	FWS	4	
	GE-B5	FWS	4	Math 399	FW	2	GE-D5	FWS	4	
	GE-F	FWS	4	GE-C5		4				
	Quarter Units:		14	Quarter Units:		13	Quarter Units:		12	39
Year 2	Math 355	FWS	4	Math 480	FWS	4	Math 529	FWS	4	
	Math 465	FWS	4	Math 499	WS	4	Math Elective	FWS	4	
	ESEC 405	FWS	4	Math 565	FWS	4	ESEC 410	FWS	4	
				ESEC 407	FWS	4	ESEC 413	FWS	4	
	Quarter Units:		12	Quarter Units:		16	Quarter Units:		16	44
Year 3	Math 553	FWS	4	Math 545	FWS	4	Math Elective	FWS	4	
	Math 599	FS	2	ESEC 419	WS	4	ESEC 513	FWS	2	
	ESEC 417	FWS	4	ESEC 512	WS	2	ESEC 514	WS	2	
	ESEC 550A	FWS	2	ESEC 550B	FWS	4	ESEC 550C	FWS	8	
	Quarter Units:		12	Quarter Units:		14	Quarter Units:		16	42

Required Units: 203 (2009-2010 Bulletin)

Notes: 1. Students can consider taking classes in summer school to lighten the course load in the regular academic year.

Department of Mathematics, CSUSB
BAITT
My Sample Degree Plan

See BAITT Sample Degree Plans for Freshman and Transfer Students. Fill in mathematics and credential coursework following the requirements and guidelines on the Credential Program Plan and BAITT Timeline.

Year/Qtr	Fall	Winter	Spring	Summer
Year 1				
Year 2				
Year 3				
Year 4				

Student's Signature: _____

Date: _____

Advisor's Signature: _____

Date: _____

**B.A. IN MATHEMATICS, INTEGRATED TEACHING TRACK (BAITT)
 DEPARTMENT APPROVAL FORM
 FOR COMPLETION OF LOWER DIVISION REQUIREMENTS
 AND SATISFACTORY G.P.A.**

The student candidate whose name appears on this form is enrolled in the B.A. in Mathematics, Integrated Teaching Track and is completing requirements to begin Education coursework. The purpose of this form is for verification that the student has completed the lower division mathematics requirements and has a cumulative grade point average of at least 2.67 in order to be eligible to enroll in education courses. This completed form is to be submitted to the Single Subject Credential Program Coordinator for review, and a copy is to be kept in the Department of Mathematics.

Name of Candidate	Phone #
Student ID #	CSUSB Email Address

Department Chair/Designee – Please check that all lower division mathematics requirements have been met by filling in the student’s course grades and current grade point average in the space provided below.

Lower-Division Requirements:	Current GPA: _____
1. Math 199 _____	
2. Math 211 _____	
3. Math 212 _____	
4. Math 213 _____	
5. Math 241 _____	
6. Math 251 _____	
7. Math 252 _____	

Department Chair/Designee Signature	Date
Candidate Signature	Date

**B.A. IN MATHEMATICS, INTEGRATED TEACHING TRACK (BAITT)
DEPARTMENT APPROVAL FORM
FOR DEMONSTRATION OF SUBJECT MATTER COMPETENCY**

The student candidate whose name appears on this form is enrolled in the B.A. in Mathematics, Integrated Teaching Track and is completing requirements to begin **Supervision** coursework. The purpose of this form is for verification that the student has demonstrated Subject Matter Competency (SMC) by having completed 80% of units in mathematics applicable to the BAITT degree. This completed form is to be submitted to the Single Subject Credential Program Coordinator for review, and a copy is to be kept with the Department of Mathematics.

Name of Candidate	Phone #
Student ID #	CSUSB Email Address

Department Chair/Designee – Please check that 80% of the mathematics units applicable to the BAITT degree have been completed by filling in the unit totals below for lower division, upper division, and elective coursework. The BAITT has 85 units of mathematics courses (25 lower division units, 52 upper division units, 8 elective units), so at least 68 units must be completed prior to enrolling in Supervision courses. **In addition, Math 399 must also be completed prior to Supervision.**

The above student has previously completed the Department Approval Form for Completion of Lower Division Requirements verifying **lower division units** totaling: _____ **units**

Upper Division		Electives
1. Math 329 (4)	8. Math 480 (4)	1.
2. Math 331 (4)	9. Math 499 (4)	2.
3. Math 345 (4)	10. Math 529 (4)	
4. Math 355 (4)	11. Math 545 (4)	
5. Math 372 (4)	12. Math 553 (4)	
6. Math 399 (2)	13. Math 565 (4)	
7. Math 465 (4)	14. Math 599 (2)	
Upper Division units complete:		Elective units complete:

Total Mathematics units completed: _____

Department Chair/Designee Signature

Date

Candidate Signature

Date