College Document \# COAS 142
UCCDocument \# _234
Date Received $\qquad$

## CATALOGYEAR <br> (Please use separate form for each add/change)

COLLEGE/SCHO OL :

Current Catalog Page(s) Affected
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Program: Delete: ___ Add: ___Change: _x __ Attach new/changed Program of Study description and 4 -year plan. If in current online catalog, provide change and attach text with changes in red.

## Justification:

The change of 8-12 grade certification to 7-12 grade certification is needed to comply with the state requirement. Meantime, previous 46 SCH major and 124 SCH total semester credit hours in 8-12 grade certification are reduced to 33 SCH major and 120 SCH semester credit hours in 7-12 grade certification.

## New

Degree Requirements for the BA with a Major in Mathematics with $\mathbf{7}^{\text {th }} \mathbf{- 1 2}^{\text {th }}$ Grade Certification

1. Hours Required: A minimum of $\mathbf{1 2 0}$ semester credit hours (SCH): $\mathbf{4 5}$ hours must be advanced, and fulfillment of degree requirements as specified in the "Requirements for Graduation" section of this catalog.
2. University Core Curriculum: $\mathbf{4 2}$ SCH as outlined in the suggested plans and as specified in the "Requirements for Graduation". MATH $\underline{2371}$ must be taken as part of the core.
3. Major: 33 SCH and the 1 SCH excess of Mathematics taken as part of the core; MATH 2414, 2415, 3310, 3325; 3330, 3360, 3365, 4310, 4335, 4390.
4. Professional Development: 23 SCH including: EDCI 1102, 2210, 3224, 3301, 3302, 3315, 4310, and 4693.
5. Support Area: 6 SCH of EDRD $\underline{3320}$ and EDSE 4350.
6. General Elective: $\mathbf{3}$ SCH of General Electives are chosen from courses offered by the College of Arts.
7. Advanced Math Elective: $\mathbf{3}$ SCH.
8. Computer Science: 4 SCH of COSC 1136, and 1336.
9. Foreign Language/Study Abroad: 6 SCH.

## B.A. with a Major in Mathematics with $7^{\text {th }}-\mathbf{1 2}^{\text {th }}$ Grade Certification

## Spring

| Freshman Year | Freshman Year |
| :---: | :---: |
| 3 ENGL 1301 English Composition I | 3 ENGL 1302 English Composition II |
| 3 HIST 1301 The U.S. to 1877 | 3 HIST 1302 The U.S. Since 1877 |
| 4 MATH 2413 Calculus I | 4 MATH 2414 Calculus II |
| 4 Natural Science | 3 Visual \& Performing Arts |
| 1 Activity/Wellness | 4 Natural Science |
|  | 1 EDCI 1102 Intro to Teaching Profession |
| 15 | 18 |
| Sophomore Year | Sophomore Year |
| 3 PSCI 2305 American National Gov't | 3 MATH 2371 Communication in Mathematics |
| 4 MATH 2415 Calculus III | 3 MATH 3330 Ordinary Differential Equations |
| 3 ENGL 23xx Survey of Literature | 3 COSC 1336 Fundamentals of Programming |
| 2 EDCI 2210 Foundations of Education | 1 COSC 1136 Fundamentals of Programming Lab |
| 3 PSYC 2314 Life Span Growth \& Develop. | 3 PSCI 2306 American State Government |
|  | 2 EDCI 3224 Teaching in Diverse Schools* |
| 15 | 15 |
| Junior Year | Junior Year |
| 3 MATH 3360 Discrete Mathematics | 3 MATH 4335 Advanced Calculus |
| 3 MATH 3360 Statistical Analysis | 3 MATH 4310 Abstract Algebra |
| 3 MATH 3310 Introduction to Linear Algebra | 3 MATH 3325 Geometry |
| 3 Foreign Language or Study Abroad | 3 Foreign Language or Study Abroad |
| 3 EDCI 3301 Assessment of Instructional Design | 3 EDRD 3320 Content Reading |
| 3 EDCI 3302 Teaching English Lang. Learners |  |
| 18 | 15 |
| Senior Year | Senior Year |
| 3 MATH 4390 Math Middle/High School | 3 EDSE 4350 Inclusive Practices for Exceptional Children |
| 3 General Elective | 6 EDCI 4693 Student Teaching** |
| 3 General Advanced Elective |  |
| 3 EDCI 3315 Effective Instruction for Diverse Pop |  |
| 3 EDCI 4310 Engaging Learners |  |
| 15 | 9 |

## 120 Hours

*Students must apply for admission to the College of Education while enrolled in EDCI 3324. Entrance into additional education courses depends on acceptance into the college. Because COED requires completion of the core curriculum as an admission requirement, the sequence of courses in the old degree plan had to be changed significantly.
**Students are admitted into student teaching only after passing the certification exam to teach secondary Mathematics.

## Changed on 8-12 grade certification

## Degree Requirements for the BA with a Major in Mathematics with Grades 87-12 Certification

1. Hours Required: A minimum of $\mathbf{1 2 4 0}$ semester credit hours (SCH): 45 hours must be advanced, and fulfillment of degree requirements as specified in the "Requirements for Graduation" section of this catalog.
2. University Core Curriculum: $\mathbf{4 2}$ SCH as outlined in the suggested plans and as specified in the "Requirements for Graduation". MATH 2371 must be taken as part of the core.
3. Major: 4633 SCH and the 1 SCH excess of Mathematics taken as part of the core; COSC 1136, $\mathbf{1 3 3 6}$, MATH $2414, \underline{2415}, \underline{3310}, \underline{3325 ;} 3330, \underline{3360}, \underline{3365}, \underline{4310}, \underline{4335}$, and 4390. and 9 SCH selected from any 4000 level MATH courses.
4. Supporting Field: $\mathbf{1 2}$ SCH in one discipline defined as a major or minor. The student must develop a plan of study for the supporting field (to include a list of courses and a justification essay that describes how the diseipline and the selected plan will suppert mathematies) in collaboration with a faculty member from the discipline.
5. Professional Development: 213 SCH including: EDCI 33011102, 33022210, 33043224, 49933301, 3302, 3315, 4310 and 43244693.
6. Support Area: 36 SCH of EDRD $\underline{3320}$ and EDSE 4350.
7. General Elective: $\mathbf{3} \mathbf{S C H}$ of General Electives are chosen from courses offered by the College of Arts.
8. Advanced Math Elective: $\mathbf{3}$ SCH.
9. Computer Science: 4 SCH of COSC 1136, and 1336.
10. Foreign Language/Study Abroad: 6 SCH.

## B.A. with a Major in Mathematics with $87^{\text {th }}-12^{\text {th }}$ Grade Certification

| Freshman Year | Freshman Year |
| :---: | :---: |
| 3 ENGL 1301 English Composition I | 3 ENGL 1302 English Composition II |
| 3 HIST 1301 The U.S. to 1877 | 3 HIST 1302 The U.S. Since 1877 |
| 4 MATH 2413 Calculus I | 4 MATH 2414 Calculus II |
| 4 Natural Science | 3 Visual \& Performing Arts |
| 1 Activity/Wellness | 4 Natural Science |
|  | 1 EDCI 1102 Intro to Teaching Profession |
| 15 | 178 |
| Sophomore Year | Sophomore Year |
| 3 PSCI 2305 American National Gov't | 3 MATH 2371 Communication in Mathematics |
| 4 MATH 2415 Calculus III | 3 MATH 3330 Ordinary Differential Equations |
| 3 ENGL 23xx Survey of Literature | 3 COSC 1336 Fundamentals of Programming |
| 2 EDCI 2210 Foundations of Education | 1 COSC 1136 Fundamentals of Programming Lab |
| 3 PSYC 2314 Life Span Growth \& Develop. | 3 PSCI 2306 American State Government |
| 3 CoSC 1336 Fundamentals of Programming | 2 EDCI 3224 Teaching in Diverse Schools* |
| 1 COSC 1136 Fundamentals of Programming Lab | 3 MATH 3360 Statistical Analysis |
| 3 MATH 2731 Communications in Mathematics | 3 Soc/Behavioral Science |
| 175 | 3 MATH 3365 Discrete Mathematics $15$ |
| Junior Year | Junior Year |
| 3 MATH 3365 Discrete Mathematics | 3 MATH 4335 Advanced Calculus |
| 3 MATH 3360 Statistical Analysis | 3 MATH 4310 Abstract Algebra |
| 3 MATH 3310 Introduction to Linear Algebra | 3 MATH 3325 Geometry |
| 3 Foreign Language or Study Abroad | 3 Foreign Language or Study Abroad |
| 3 EDCI 3301 Assessment of Instructional Design | 3 EDRD 3320 Content Reading |
| 3 EDCI 3302 Teaching English Lang. Learners | 3-MATH 4000 Advanced Math Elective |
| 3 MATH 4335 Advanced Calculus | 3 EDCI 3301 Thry\&Pract Public School Tchg |
| 3 EDRD 3320 Content Reading | 3 EDCI 3302 Language Acq\&Develop |
| 3 Supporting Field | 3 Supporting Field |
| 3 Supporting Field | 185 |
| 158 |  |
| Senior Year | Senior Year |
| 3 MATH 4390 Math Middle/High School | 3 EDSE 4350 Inclusive Practices for Exceptional Children |
| 3 General Elective | 6 EDCI 4693 Student Teaching** |
| 3 General Advanced Elective | 3 MATH 4390 Math Middle/High School |
| 3 EDCI 3315 Effective Instruction for Diverse Pop | 9 EDCI 4993 Student Teaching |
| 3 EDCI 4310 Engaging Learners |  |
| 3 MATH 4000 Advanced Math Elective |  |
| 3 MATH 4000 Advanced Math Elective |  |
| 3 EDDP Teaching Div Stu Pop |  |
| 3 EDCI 3304 Methods Mgt\&Discipline | 129 |
| - |  |
| - |  |
| 15 |  |

## 1240 Hours

Approvals:

## Chair

Department Curriculum Committee

## Chair

Department

Chair
College Curriculum Committee

Dean

Signature
Date
Digitally signed by Qingwen Ni

ou=TAMIU, email=qni@tamiu.edu, $c=$
Date: 2013.03 .08 11:52:33-06'00'

Date: 2013.03.13 09:43:06-05'00'
Kevin Lindberg amaly beab beanuas
DN: $\mathrm{cn}=$ Kevin Lindberg, $\mathrm{o}=$ COAS, ou=COAS Dean's Office
email=klindberg@tamiu.edu, $c=$ US
Date: 2013.03.13 10:16:02-05'00'
Kevin Lindberg

