1. **Degree/Major Title:**

   Secondary Mathematics Education BA

2. **Contact person:** Diane Schmidt

   **College:** Education

   **Department/School:** Curriculum, Instruction & Culture

   **Telephone:** 239-590-7741

3. **Briefly describe the proposed revision(s).**

   This Program Revision replaces EDF 3201 Diversity of Human Experience (6) with EDF XXX
   Adolescent Growth & Development (3) and TSL 4340 Methods, Curriculum, and Instructional
   Effectiveness in ESOL (3). The revision also replaces EDG 3201 Professional Studies with EEX 4070
   Integrating Exceptional Students in Regular Education (3) and EDF 3253 Learning Management in
   the Inclusive Classroom (3). MAC 2313 Calculus III is being changed from a recommended prerequisite to a
   required prerequisite. MAP 2302 Differential Equations and MHF 4404 History of Math are added as
   required content courses.

4. **Effective date:** Fall 2014

   Changes are effective in the fall of the year. Exceptions are approved only in unusual circumstances with adequate
   justification.

5. **Briefly explain the rationale for the proposed revision.**

   Link the proposed revision to assessment and institutional effectiveness activities (feedback from students, market demands,
   program evaluation, resource allocation, etc.).

   These changes will benefit the secondary education majors in several ways. 1) Our annual data review
   revealed that less than 70% of secondary education majors are reaching the targeted expectation for
applying Florida ESOL Professional Standards to their planning and teaching activities. Students will have an additional course in ESOL methods to address this issue. 2) Eliminating the six hour courses will address difficulties students experience in scheduling content courses from the College of Arts & Sciences. 3) The changes requiring MAC 2313 Calculus III as a prerequisite and the addition of two required content courses were made based on feedback and recommendations from the Secondary Education Advisory Board and faculty from the Department of Mathematics. This will provide candidates with a higher level of content knowledge needed to teach secondary mathematics.

6. Describe additional library resources needed to support this revision? Explain rationale for response, even if answer is None.

None, current resources needed for these revisions already exist in the other undergraduate programs.

7. Describe additional faculty resources needed to support this revision? Explain rationale for response, even if answer is None.

None, faculty responsible for current courses being dropped will teach the new courses being added. The addition of secondary math students to courses in the Department of Mathematics will have a positive impact on enrollments.

8. Describe additional technology, facility, laboratory, or other resources needed to support this revision? Explain rationale for response, even if answer is None.

None, no special equipment or facilities are needed for these courses.

9. What impact will the proposed revision have on other colleges, units, or programs?

Secondary Education changes are being made in conjunction with all the undergraduate programs to ensure courses and resources are adequate for all programs. The addition of math content courses will improve enrollments for the College of Arts & Sciences.

10. New courses:

☐ No new courses are required.

☒ New courses are needed. List prefix/number/title below. Complete a Course Add Form for each from the Curriculum Management System - [https://midas.fgcu.edu/acadaft/scns/](https://midas.fgcu.edu/acadaft/scns/).

EDF XXXX Adolescent Growth & Development

11. Change to existing courses:

☒ No existing courses are being changed.

☐ Existing courses are being changed. List prefix/number/title below. Complete a Course Change Form for each from the Curriculum Management System - [https://midas.fgcu.edu/acadaft/schis/](https://midas.fgcu.edu/acadaft/schis/).

12. Termination of existing courses:

☒ No existing courses are being deleted from the FGCU course inventory.

☐ Courses are being terminated. List prefix/number/title below. Complete a Course Terminate Form for each course from the Curriculum Management System - [https://midas.fgcu.edu/acadaft/sens/](https://midas.fgcu.edu/acadaft/sens/).

13. Catalog copy:

See Instructions above.

14. Additional remarks:
<table>
<thead>
<tr>
<th><strong>APPROVALS</strong> (required prior to submission)</th>
</tr>
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<tbody>
<tr>
<td>Department/Program Chair/Director</td>
</tr>
<tr>
<td>College Curriculum Committee Chair</td>
</tr>
<tr>
<td>College Dean</td>
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<th>Date</th>
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<td>2/6/14</td>
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<td>1/23/14</td>
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Does another department of unit provide related expertise or offer similar courses? 

- No  
- Yes (If yes, have the other department complete the following. Attach a separate sheet if needed.)

<table>
<thead>
<tr>
<th>Department/Unit:</th>
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<tbody>
<tr>
<td>Supports this proposal</td>
</tr>
<tr>
<td>Does not support this proposal</td>
</tr>
<tr>
<td>Defers Recommendation</td>
</tr>
</tbody>
</table>

Authorizing signature: ___________________________ Date ___________________________

Comments:

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FGCU Undergraduate Curriculum Team or Graduate Curriculum Team

- Approves  
- Approves w/conditions  
- Does not approve

Signature: ___________________________ Date ___________________________

Comments/Conditions:
Secondary Mathematics Education, BA

Program Requirements for 2014-2015 Catalog Year

The General Education Program Website is located at http://www.fgcu.edu/general_education

1. FGCU General Education Program (GEP) (36 hrs)
   Refer to the General Education Program for more information.
   - Communication (6 hrs)
   - Mathematics (6 hrs)
   - Humanities (9 hrs)
   - Social Sciences (6-9 hrs)
   - Natural Sciences (6-9 hrs)

   Note: At least one Natural Sciences course must include a laboratory or field component. Courses meeting this requirement contain a "C" or "L" in their course numbers. Each combined lecture and laboratory course (marked with a C) is equivalent to taking the lecture and laboratory separately.

2. Common Prerequisites (variable)*
   - EDF 2005* Intro to Teach Prof (3)
   - EDF 2085* Intro to Diversity for Educ (3)
   - EME 2040* Intro to Tech for Educ (3)
   - In addition to EDF 2085, a minimum of 6 hrs with an international or diversity focus is required. Eligible courses will be determined by the community college or university where the student is currently earning the Associate of Arts or baccalaureate degree. Foreign language courses may be used to meet this requirement.
   - Other program prerequisites:
     - MAC 2311 Calculus I (4 hrs)
     - MAC 2312 Calculus & Analytic Geometry II (4 hrs)
     - MAC 2313 Calculus III Elective in Mathematics (4 hrs) [MAC-2313 recommended]

   In addition to required program prerequisites, students are strongly encouraged to complete MAP 2302—Differential Equations prior to being admitted into the major.

   *Courses must be completed with a minimum grade of C or better.

3. Required Courses in the Major (51-53 hrs)
   The following course sequence assumes a fall start with full-time attendance. Students beginning in spring or summer or attending part-time should see a College of Education Advisor.

   Block-1
   - EDF 3201 Diversity of Human Experience (6)
   - EDG 3201 Professional Studies (6)
   - EDF 3252 Adolescent Growth & Development (3)
   - EDF 3253 Learning Management in the Inclusive Classroom (3)
   - EDF 4470 Classroom Assessment (3)
   - EDG 4937 Senior Seminar: Initial Teacher Prep (3)
• EEX 4070 Integrating Exceptional Students in Regular Ed (3)
• MAE 4152 Math Methods 6-12 (3)
• MAE 4942 Integrated Field Experience, Secondary Ed/Math (3)
• MAE 4940 Internship: Mathematics Ed (9)
• MAP 2302 Differential Equations (3)
• MAE 4936 Senior Seminar: Mathematics Ed (3)
• MAS 3105 Linear Algebra (3)
• MHF 2191 Mathematical Found. (3)
• MHF 4404 History of Math (3)
• RED 4350 Literacy Content & Processes (3)
• TSL 4520 Second Language Acquisition, Communication & Culture (3)
• TSL 4340 Methods, Curriculum & Instructional Effectiveness (3)
• MAS 3105 Linear Algebra (3)

Block 2

• TSL 4520 Second Language Acquisition, Communication & Culture (3)
• MAE 4152 Math Methods 6-12 (3)
• MHF 2191 Mathematical Found. (3)
*Subject Area Elective

Block 3

• MAE 4942 Integrated Field Experience, Secondary Ed/Math (3)
• MAE 4940 internship: Mathematics Ed (9)
• RED 4350 Literacy Content & Processes (3)
• IDS 3920 University Colloquium
(see below)

Block 4

• MAE 4942 Integrated Field Experience, Secondary Ed/Math (3)
• EDF 4470 Assessment & Action Research (3)
*Subject Area Elective
*Subject Area Elective

Block 5

• MAE 4936 Senior Seminar: Mathematics Ed (3)
• MAE 4940 Internship: Mathematics Ed (9)
4. **Subject Area Restricted Electives** *(13-16 hrs)*

Select from the following with approval of the college academic advisor:

- **MAA 4226 Analysis I (3)**
- **MAD 3107 Discrete Mathematics (3)**
- **MAD 4401 Numerical Analysis (3)**
- **MAP 3161 Mathematics for Science and Engineering (4)**
- **MAP 3162 Probability and Statistics (4)**
- **MAP 3163 Operations Research I (3)**
- **MAS 4301 Abstract Algebra I (3)**
- **MHF 4404 History of Math (3)**
- **STA 3163 Applied Statistics (3)**
- **STA 4234 Into. to Regression Analysis (3)**

*Recommended for candidates who may wish to pursue 18 graduate credits or a more in math.*

5. **University Requirements (3 hrs)**

- **IDS 3920 University Colloquium (3)**

6. **Additional Electives (variable)**

Additional electives may be required to reach a minimum of 120 credit hours for the baccalaureate degree.

**TOTAL SEMESTER HOURS REQUIRED: 120 HRS**

**Additional Graduation Requirements**

- A grade of C or higher in all College of Education (COE) courses with an overall GPA of 2.5 in all COE coursework and in all coursework attempted.
- Pass the Florida Teacher Certification Examination (FTCE), including the Professional Education examination, two subject area examinations (normally completed during Block 4 and Block 5) and the General Knowledge Test (the CLAST will meet this requirement if passed prior to July 1, 2002.)
- A minimum of 48 upper division hours (courses numbered 3000 and higher).
- Complete 30 of the last 60 hours at FGCU.
- Satisfactory foreign language admission requirement.
- Satisfaction of Service Learning requirements: [www.fgcu.edu/connect/](http://www.fgcu.edu/connect/)
- Completion of all components of the Teacher Effectiveness Portfolio at the Proficient performance level.

**Transfer Notes and Acceptable Substitutes**

The COE limits the transfer of coursework into its upper-division, undergraduate programs. To be considered, courses must have been completed with a minimum grade of C and no more than five years prior to the date of entry into the College of Education undergraduate program.

- **EDF 2005**: may substitute EDF X005 (3)
- **EDF 2085**: may substitute EDF X085 (3)
- **EME 2040**: may substitute EME X040 (3)
- **MAC 2311**: may substitute MAC X311 (4)
- **MAC 2312**: may substitute MAC X312 (4)
- **Math Elective**: may substitute MAC XXXX (4) or MTG XXXX (4) or MAS XXXX (4)
For All Majors: Students are strongly encouraged to select required lower division electives that will enhance their general education coursework and that will support their intended baccalaureate degree program. Students should consult with an academic advisor in their major degree area.
# Suggested Course Sequence

**SECONDARY MATHEMATICS EDUCATION (B.A.)**

Department of Curriculum, Instruction & Culture  
*Web Address: http://coe.fgcu.edu/sectioedba/*

The following course sequence assumes full-time attendance.

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<thead>
<tr>
<th>Semester</th>
<th>Fall Admission</th>
<th>Spring Admission</th>
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<tbody>
<tr>
<td>Fall</td>
<td>- EDF XXXX Adolescent Growth &amp; Development (3)</td>
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<td></td>
<td>- EEX 4070 Integrating Exceptional Students in Regular Ed (3)</td>
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<td></td>
<td>- Required Content Course 1</td>
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<td>- Required Content Course 2</td>
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<td>- Elective Content Course 1</td>
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<tr>
<td>Spring</td>
<td>- TSL 4520 Second Language Acquisition, Communication &amp; Culture (3)</td>
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<td>- SCE 4330 Science Methods: 6-12 (3)</td>
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<td>- Required Content Course 4</td>
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<td>- Elective Content Course 2</td>
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<td>Summer</td>
<td>- RED 4350 Literacy Content &amp; Processes (3)</td>
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<td>Fall</td>
<td>- TSL 4340 Methods, Curriculum &amp; Instructional Effectiveness (3)</td>
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<td>- SCE 4940 Internship: Science Education 6-12 (9)</td>
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*Note: NOT NOTED ON PREVIOUS PROPOSAL IN CATALOG COPY*

| Fall     | - TSL 4340 Methods, Curriculum & Instructional Effectiveness (3)              |                                                                                 |
|          | - TSL 4520 Second Language Acquisition, Communication & Culture (3)          |                                                                                 |
|          | - SCE 4330 Science Methods: 6-12 (3)                                         |                                                                                 |
|          | - Required Content Course 1                                                  |                                                                                 |
|          | - Required Content Course 2                                                  |                                                                                 |
|          | - Elective Content Course 1                                                  |                                                                                 |

Fall 2013
Required Content Courses (12)

- MAP 2302 Differential Equations (3)
- MAS 3105 Linear Algebra (3)
- MHF 2191 Mathematical Found. (3)
- MHF 4404 History of Math (3)

Subject Area Electives* (6 hrs)

Select from the following with approval of the college academic advisor:

- MAA 4226 Analysis I (3)
- MAD 3107 Discrete Mathematics (3)
- MAD 4401 Numerical Analysis (3)
- MAP 3181 Mathematics for Science and Engineering (4)
- MAP 3162 Probability and Statistics (4)
- MAP 3163 Operations Research I (3)
- MAS 4301 Abstract Algebra I (3)
- MHF 4404 History of Math (3)
- STA 3163 Applied Statistics (3)
- STA 4234 Intro. to Regression Analysis (3)

* Recommended for candidates who may wish to pursue 18 graduate credits or a more in math.