

**EDISON STATE COLLEGE**  
**CURRICULUM COMMITTEE**  
**NEW PROGRAM PROPOSAL FORM**

**TO:** CURRICULUM COMMITTEE  
**FROM:** Dr. Eileen DeLuca  
**PRESENTER:** Dr. Eileen DeLuca  
**DATE:** 4-5-10

Check one:  New certificate program  New AS degree program  
 New Bachelor's Degree

Program Description: (Attach proposed catalog page with program information, along with samples of curricula for similar programs at other institutions)  
See attached program sheet.

Similar programs at other Florida community colleges/state universities:

**Colleges/State Universities offering Middle Grades Mathematics (5-9):**

Florida Institute of Technology (Private)  
Florida Memorial University (Private)  
Florida State University (Public)  
Indian River State College (Public)  
Northwest Florida State College (Public)  
St. Petersburg College (Public)  
Southeastern University (Private)  
Chipola College (Public)

Describe the process by which the need for the new program was identified:

The Middle Grades Mathematics program represents a critical shortage area locally and statewide and will meet immediate needs of the school districts in ESC's region. Edison seeks approval to implement affordable Middle Grades Education programs with academic rigor and relevance that will provide students with opportunities for professional and academic advancement. The Middle Grades program will prepare graduates to secure teaching positions in fifth through ninth grade levels in various mathematics content areas. It also provides districts with teachers prepared for instruction at the elementary, middle and high school levels to maximize content knowledge and provide smooth transitions for students.

Beginning in May 2009, Education program administrators, faculty and staff began the internal and external survey process. On May 24, 2009, the Edison State College District Board of Trustees approved a motion for the College to apply for authorization to offer Bachelor of Science Degrees in Middle Grades Education Math, Middle Grades Education Science and Middle Grades Education in Language Arts with planned implementation dates in Fall 2010. The decision to pursue these degree programs is based on several factors to include strong community support, documented workforce need, the College's successful education baccalaureate programs, and feedback from students enrolled in Edison's associate degree programs in 2008-2009.

The Florida Agency for Workforce Innovation finds that by the 2012-2013 academic year there will be a need for an additional 3,397 middle grades math, science and language arts teachers in Florida. These figures represent a significant increase in the number of new middle grades teachers needed between 2009 and 2013 in the state.

Locally, no public or private institutions of higher education in ESC's region offer Middle Grades Education programs nor do any local institutions intend to develop programs in these areas. ESC seeks to provide additional access to low income and minority students who are less likely to

attend private institutions. While state universities may restrict admissions according to criteria such as high school grade point averages and scores on SAT or ACT exams, ESC remains an open-door, baccalaureate degree-granting public institution. Edison devotes considerable resources to remediating the academic skills of those who enter unprepared to take college-level courses. Those who persist to complete an associate degree have acquired the necessary skills to succeed at the baccalaureate level. Through survey research, students have expressed the desire to remain at Edison, an environment in which they have experienced success, to continue their studies.

According to the Office of Research and Evaluation of the Florida Department of Education (December 2008), the three Middle Grades programs proposed (Mathematics, Science, Language Arts) have been designated by the State Board of Education as the top critical teacher shortage areas for 2009-2010. The Florida Agency for Workforce Innovation finds that by the 2012-2013 academic year there will be a need for an additional 3,397 middle grades math, science and language arts teachers in Florida. These figures represent a significant increase in the number of new middle grades teachers needed between 2009 and 2013 in the state.

Project average enrollment for core courses: Each Middle Grades Education program estimates enrollment of 20 students during the 2010-2011 academic year, as reflected on each Enrollment, Performance and Budget Plan (for a total of 60 new students).

Describe how this projection was determined: The enrollment projection was determined based on student inquiry and student transcript evaluations. Previous baccalaureate programs have started with a similar number of students.

List personnel resources required for implementation in addition to existing resources. Indicate in the box the number of each type of position required:

Faculty position(s) (list discipline)	full time full time	adjunct adjunct
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Staff position(s) (list title)	full time full time	part time part time
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Total annual expenses for new positions:

List annual amount required for educational materials/supplies or other operating expenses for implementation: \$4800.00

Identify the funding source to be used for personnel and operating expenses: Baccalaureate Budget Grant

**JUSTIFICATION FOR CURRICULUM ACTION, OTHER EXPLANATORY INFORMATION:**

**TERM IN WHICH PROPOSED ACTION WILL TAKE EFFECT:** Fall 2010

**For any term other than fall of the academic year following submission, approval of the Vice President of Academic and Student Affairs is required.**

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**Signature of Vice President of Academic and Student Affairs (if required)**

**DEPARTMENT CHAIR OR PROGRAM COORDINATOR'S ENDORSEMENT**

\_\_\_\_\_ DATE: \_\_\_\_\_

**ASSOCIATE/ ACADEMIC DEAN ENDORSEMENT:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**STUDENT ASSESSMENT COMMITTEE CHAIR:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**DISTRICT DEAN OF INSTRUCTION ENDORSEMENT:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**After reviewing and signing this proposal, the District Dean will return the proposal to the Department Chair or Program Coordinator**

The Department Chair/Program Coordinator will send this proposal along with any other proposals from his/her department being submitted for review by the Curriculum Committee to the office of the Vice President of Academic and Student Affairs by the Friday before the next scheduled Curriculum Committee meeting.

**NOTE:** All new courses that are part of a new degree program must be approved separately and individually using the New Course Proposal Form. This proposal must be accompanied by the New Course Proposal Form for each new core and elective course that comprise the degree program along with a common course syllabus for each course.

# Bachelor of Science

## Middle Grades Mathematics Education

The Bachelor of Science (BS) in the Middle Grades Mathematics Education program is designed to prepare individuals to teach mathematics to students in grades 6-9. The program provides an educational pathway for students who have earned an Associate in Arts degree to include specific math and education prerequisites. Upon graduation, students will meet the mandated state teaching requirements, including teacher certification exams.

Program Highlights: The BS in Middle Grades Mathematics Education program includes courses in statistics, geometry, liberal arts and algebra. In addition, teacher candidates will take courses to prepare them to work with English Language Learners and students with exceptionalities. Throughout the program, teacher candidates will develop classroom management and assessment strategies for working with a diverse population of students. Field experience requirements are progressive in nature, building upon previous semester experiences. Students will progress through diverse field experiences, teach lessons through the practicum courses, and complete a full-time teaching internship in their final semester. Courses are offered for full and part time students, with blended and on-line course offerings where applicable.

### General Education Requirements:

	Credit Hours
ENC 1101.....	3
ENC 1102.....	3
SPC 1017 or SPC 2023 .....	3
Humanities Electives.....	6
to include 3 credits writing intensive	
*Social Science Electives.....	9
to include one WOH or EUH course	
**College Level Mathematics Electives .....	6
Natural Science Electives w/Lab.....	6
<b>TOTAL.....</b>	<b>36</b>

### Required Program Prerequisites (grades of C or better) and electives for the Associate in Arts Degree (minimum of 24 credit hours):

- \*EDF 2005 Intro to the Teaching Profession
- \*EDF 2085 Intro to Diversity for Educators
- \*EME 2040 Intro to Technology for Educators
- \*PSY 2012 General Psych. *or* DEP 2004 Dev. Psych.

### Lower division courses taken during final two years:

**STA 2023 Statistics.....	3
**MTG 2206 Geometry.....	3
**MGF 1106 Liberal Arts I.....	3
**MGF 1107 Liberal Arts II.....	3
<b>TOTAL.....</b>	<b>12</b>

\*courses can be used to satisfy general education requirements in social sciences (in addition to specific WOH or EUH requirement)

\*\*courses can be used to satisfy general education requirements in mathematics

Students may take one additional credit to meet 120 total credit hours.

### Degree Requirements (60 credit hours):

	Credit Hours
EDG 4930 Special Topics in Education I.....	1
EDM 3320 Middle Grades Curriculum and Instruction... ..	3
RED 4335 Teaching Reading in the Content Areas .....	3
TSL 4140 ESOL Methods, Curriculum & Assessment ...	3
EDF 3214 Human Development and Learning .....	3
ESE 4323 Educational Assessment .....	3
EDG 3410 Classroom Management .....	3
RED 4350 Literacy Content and Processes .....	3
EEX 3012 Educational Needs of Students with Exceptionalities .....	3
EDF 4782 Ethics and Law .....	2
MAE 3321 Teaching Geometry in Middle School with Practicum .....	4
MAE 3823 Teaching Algebra in Middle School with Practicum .....	4
MAE 4943 Internship: Middle Grades Mathematics Education.....	12
<b>TOTAL CREDIT HOURS.....</b>	<b>120</b>

### School Based Hour Requirements (685 total hours)

EDG 3410 Classroom Management (15)	
TSL 4140 ESOL Methods, Curriculum & Assessment (15)	
EDM 3230 Middle Grades Curriculum and Instruction (10)	
MAE 3321 Teaching Geometry in Middle School with Practicum (35)	
MAE 3328 Teaching Algebra in Middle School with Practicum (35)	
EEX 3012 Educational Needs of Students with Exceptionalities (15)	
MAE 4943 Internship: Middle Grades Mathematics Education (560)	

## Middle Grades Mathematics Program Requirements (60 credit hours)

### Key

**APPROVED:** The course was previously approved by Curriculum Committee

**TBS:** To Be Submitted followed by the semester and year

**CS:** Currently submitted in addition to program proposals

### Sample Course Sequence:

*First Semester (full time students): 14 credit hours*

EDG 4930	Special Topics	1	APPROVED
ESE 4323	Educational Assessment	3	APPROVED
STA 2023	Statistics	4	APPROVED
EDG 3410	Classroom Management	3	APPROVED
EDM 3230	Middle Grades Curriculum & Instruction	3	TBS 9/10

This course is an introduction to the field of curriculum and instruction specifically for the middle grades teacher. Teacher candidates will examine the uniqueness of the middle school learner, the curriculum and the role and responsibilities of teaching including the role of special teachers, problems of individual learners and materials and strategies appropriate for the selected area of concentration. Course content includes curriculum and instructional strategies in middle grades (5-9) language arts, mathematics, and science. Teacher candidates will connect theory to practice through the creation, implementation and evaluation of meaningful and authentic lessons and experiences. This course requires a minimum of 10 hours in a 5-9 classroom setting.

*Second Semester (full-time students): 13 credit hours*

TSL 4140	ESOL Curriculum, Methods	3	APPROVED
MTG 2206	College Geometry	3	APPROVED
RED 4335	Reading in the Content Areas	3	APPROVED
MAE 3321	Teaching Geometry in Middle School w/practicum	4	TBS 9/10

This course is designed to prepare teacher candidates to construct meaningful connections between being a learner of mathematics and being a teacher of mathematics specifically targeting geometry. Teacher candidates will apply appropriate strategies in designing and implementing standards-based lessons with a geometry focus. Teacher candidates will integrate relevant manipulatives and technology resources for understanding geometry concepts in their lessons. This course requires thirty-five hours of practicum in a 5-9 classroom setting.

### THEORY AND METHODS FOR TEACHING GEOMETRY IN THE MIDDLE SCHOOL.

*Third Semester (full-time students' typical summer schedule): 8 credit hours*

MGF 1107	Liberal Arts Math II	3	APPROVED
MGF 1106	Liberal Arts Math I	3	APPROVED
EDF 4782	Ethics and Law	2	APPROVED

*Fourth Semester (full-time students): 13 credit hours*

RED 4350	Literacy Con and Processes	3	APPROVED
EEX 3012	Educational Needs Ex Stud	3	APPROVED
EDF 3214	Human Development and Learning	3	APPROVED
MAE 3823	Teaching Algebra in Middle School w/practicum	4	TBS 9/10

This course is designed to prepare teacher candidates to construct meaningful connections between being a learner of mathematics and being a teacher of mathematics specifically targeting algebra. Teacher candidates will apply appropriate strategies in designing and implementing standards-based lessons with an algebra focus. Teacher candidates will integrate relevant technology resources for understanding algebra concepts in their lessons. This course requires thirty-five hours of practicum in a 5-9 classroom setting.

*Fifth Semester (fall or spring only): 12 credit hours*

MAE 4943	Internship: Middle Grades Math Education	12	TBS 9/10
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This course requires teacher candidates to lead instruction in an area 5-9 mathematics classroom under the supervision of a trained clinical educator. Guided by the Florida Educator Accomplished Practices, ESOL Performance Standards, and ESOL K-12 Competencies and Skills, teacher candidates will write lesson plans, choose materials, conduct lessons, and manage student behavior during one semester of full day internship. Over the course of the internship, teacher candidates will conduct systematic inquiry about their work with children in 5-9 school settings and continually revise their classroom instruction and management through a cycle of reflective practice. Teacher candidates will participate in a series of required mandatory seminars at Edison State College.