

Miami Dade College
Office Associate Provost, Academic Affairs

May 18, 2012

MEMORANDUM

TO: Rolando Montoya

FROM: Michael Reiner

SUBJECT: APPROVAL OF CURRICULUM REPORT #90

Attached for your approval is the approved curriculum presented at the May 8, 2012 CASSC meeting.

The information in Curriculum Report #90 includes the following items:

Curriculum Requiring Approval

1. **School of Engineering and Technology**

- **Add New Course:**
COP2650 – Android Application Development
- **Program Changes:**
Biotechnology – Bioinformatics (Replace end-termed course)
Web Development Specialist (Align certificate to parent AS)

2. **Fine Arts**

- **Course Deletion:**
MUS2334 Basic Multi-Track Tape Recording & Studio Technique

3. **School of Education**

- **Change Existing Courses:**
EDG3321 – General Teaching Skills
EDG3443 – Classroom and Behavior Management
EEX3071 – Teaching Exceptional & Diverse Populations in Inclusive Settings
EEX4221 – Assessment in Special Education
EME3430 – Instructional Technology in Mathematics and Science
MAE4360 – Methods of Teaching Mathematics
MAE4940 – Advanced Topics in Mathematics Education Practicum
RED3013 – Foundations of Reading Instruction
SCE4362 – Methods of Teaching Science
SCE4363 – Advanced Topics in Science Education Practicum
- **Add New Courses:**
EEX3102 – Language Development and Communication Disorders
EEX4833 – Practicum in Special Education
EEX4XXX – Instructional and Assistive Technology in Special Education
TSL3XXX – ESOL I: Second Language Acquisition, Communication and Culture
TSL4311 – ESOL II: Methods of Teaching ESOL Students
- **Program Changes:**
BS Secondary Science Education – Chemistry
BS Secondary Science Education – Earth/Space
BS Secondary Science Education – Biology
BS Secondary Mathematics Education
Exceptional Student Education (K-12)

4. **Placement Criteria Document (2012-2013)**
https://www.mdc.edu/ir/CPT_CLAST/Placement_Document_2012-2013_Draft.pdf

Informational Items –

5. **Testing Fees 2012-2013**
ACCUPLACER (CPT) and PERT: Eliminate the July 1 start date for assessing are testing fee to High school graduates. Effective with June 7, 2012 graduates: use the 1st day after the M-DCPS Last Day of School to begin charging a re-test fee to high school graduates.

If I can be of further assistance, please do not hesitate to contact me.

Attachment

Miami Dade College
College-wide CASSC Meeting – MAY 8, 2012
CURRICULUM REPORT #90

1. School of Engineering and Technology

Add New Course

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|-----------------------------------|----------------|---------------|------------------|
| COP2650 | Android Application Development 1 | 4 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: This course teaches the principles of Android application development for majors in Computer Science, Computer Information Systems, and related disciplines. Students will learn how to create mobile applications for deployment to Android smartphones, tablets or simulators utilizing open source software (Java, Eclipse IDE, Android Plug-In and Android SDK) for development. Emphasis will be placed on the underlying Android framework to create quality applications. (3 hr. lecture 2 hr. lab). Prerequisites: COP2800,

Curriculum Action Rationale: The current adoption rate of mobile technology has surpassed that of the PC and so will the demand for mobile application developers. Android is the fastest growing mobile platform on the market. The Android Application Development courses will enhance the current AS program in Computer Programming and Analysis - Business Application (25065) by teaching the student how to create mobile applications utilizing specific mobile technology (re: attached program sheet showing course inclusion as an elective).

Proposed Fee: \$58.00

Rationale/Justification: Fees incurred to cover costs related to course delivery. Estimated expenses for this new course are projected based on the School's documented costs for existing courses.

APPROVE _____ **OPPOSE** _____ **MORE INFORMATION** _____

Program Changes:

Executive Summary – Modifications to Program

Program Title: Biotechnology-Bioinformatics
Program Code: 22028
Department: Computer Science
Effective Term: Summer 2011-3
Degree Type: Advanced Technical Certificate (ATC)
Affected Campuses: 1, 2, 3, 5, 6, 7, 8

Rationale/Modification:

The discipline reviewed the course offering, and determined that **COP2180 “PERL Programming”** is outdated (no longer appropriate for the program of study), and was previously deleted (2011-1) from the curriculum guide. We are proposing to insert the existing course **COP1334 “Introduction to C++ Programming”** into the Biotechnology – Bioinformatics (22028) program of study (AS program) to enable students to complete the program.

ASSOCIATE IN SCIENCE DEGREE
PROGRAM OF STUDY: BIOTECHNOLOGY-BIOINFORMATICS (22028)
EFFECTIVE TERM: Summer 2011 (2011-3)

SHOWING CHANGES

I. GENERAL EDUCATION REQUIREMENTS

1. COMMUNICATIONS (3.00 credits)

- [ENC 1101](#) - English Composition 1 (3 credits)
-

2. ORAL COMMUNICATIONS (3.00 credits)

- [SPC 1017](#) - Fundamentals of Speech Communication (3 credits)
-

3. HUMANITIES (3.00 credits)

- [PHI 2604](#) - Critical Thinking/Ethics (3 credits)
-

4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)

- [CLP 1006](#) - Psychology of Personal Effectiveness (3 credits)
-

5. MATH/SCIENCE (6.00 credits)

- [MAC 1105](#) - College Algebra (3 credits) [BSC 2010](#) - Principles of Biology 1 (3 credits)
-

6. COMPUTER COMPETENCY

Test type(s) needed:

- [CGS 1060](#) - Introduction to Microcomputer Usage (4 credits)
-

7. MAJOR COURSE REQUIREMENTS (23.00 credits)

- | | |
|--|---|
| <input type="checkbox"/> STA 2023 - Statistical Methods (3 credits) | <input type="checkbox"/> BSC 2426L - Biotechnology Methods and Applications 1 Lab (2 credits) |
| <input type="checkbox"/> BSC 2010L - Principles of Biology 1 Lab (2 credits) | <input type="checkbox"/> BSC 2427 - Biotechnology Methods and Applications 2 (3 credits) |
| <input type="checkbox"/> CHM 1045 - General Chemistry (3 credits) | <input type="checkbox"/> BSC 2427L - Biotechnology Methods and Applications 2 Lab (2 credits) |
| <input type="checkbox"/> CHM 1045L - General Chemistry Lab (2 credits) | <input type="checkbox"/> BSC 2943L - Bioscience Internship (3 credits) |
| <input type="checkbox"/> BSC 2426 - Biotechnology Methods and Applications 1 (3 credits) | |
-

8. MAJOR COURSE ELECTIVE (20.00 credits)

- | | |
|---|--|
| <input type="checkbox"/> CGS 1021 - Scientific Computing (4 credits) | <input type="checkbox"/> COP 2180 - PERL Programming |
| <input type="checkbox"/> CGS 1145 - Introduction to Bioinformatics (4 credits) | <input type="checkbox"/> COP1334 - Introduction to C++ Programming (4 credits) |
| <input type="checkbox"/> CIS 1321 - Introduction to Systems Analysis and Design (4 credits) | <input type="checkbox"/> COP 2700 - Database Application Programming (4 credits) |

ASSOCIATE IN SCIENCE DEGREE
PROGRAM OF STUDY: BIOTECHNOLOGY-BIOINFORMATICS (22028)
EFFECTIVE TERM: Summer 2011 (2011-3)

PROPOSED

I. GENERAL EDUCATION REQUIREMENTS

1. COMMUNICATIONS (3.00 credits)

[ENC 1101](#) - English Composition 1 (3 credits)

2. ORAL COMMUNICATIONS (3.00 credits)

[SPC 1017](#) - Fundamentals of Speech Communication (3 credits)

3. HUMANITIES (3.00 credits)

[PHI 2604](#) - Critical Thinking/Ethics (3 credits)

4. BEHAVIORAL/SOCIAL SCIENCE (3.00 credits)

[CLP 1006](#) - Psychology of Personal Effectiveness (3 credits)

5. MATH/SCIENCE (6.00 credits)

[MAC 1105](#) - College Algebra (3 credits)

[BSC 2010](#) - Principles of Biology 1 (3 credits)

6. COMPUTER COMPETENCY

Test type(s) needed:

[CGS 1060](#) - Introduction to Microcomputer Usage (4 credits)

7. MAJOR COURSE REQUIREMENTS (23.00 credits)

[STA 2023](#) - Statistical Methods (3 credits)

[BSC 2426L](#) - Biotechnology Methods and Applications 1 Lab (2 credits)

[BSC 2010L](#) - Principles of Biology 1 Lab (2 credits)

[BSC 2427](#) - Biotechnology Methods and Applications 2 (3 credits)

[CHM 1045](#) - General Chemistry (3 credits)

[BSC 2427L](#) - Biotechnology Methods and Applications 2 Lab (2 credits)

[CHM 1045L](#) - General Chemistry Lab (2 credits)

[BSC 2943L](#) - Bioscience Internship (3 credits)

[BSC 2426](#) - Biotechnology Methods and Applications 1 (3 credits)

8. MAJOR COURSE ELECTIVE (20.00 credits)

[CGS 1021](#) - Scientific Computing (4 credits)

[COP1334 Introduction to C++ Programming \(4 credits\)](#)

[CGS 1145](#) - Introduction to Bioinformatics (4 credits)

[COP 2700](#) - Database Application Programming (4 credits)

[CIS 1321](#) - Introduction to Systems Analysis and Design (4 credits)

Executive Summary – Modifications to Program

Program title: Web Development Specialist
Program Code: 66051
Effective Term: Fall 2012-1
Degree Type: College Credit Certificate (CCC)
Affected Campuses: 1,2,3,5,5,7,8

Rationale: To modify the **COLLEGE CREDIT CERTIFICATE** by adding two tracks. All courses exist within the parent AS degree Microsoft (25063) and Open Source (25069) options.

Modification:

1. General Education Requirements (Area 1):

- Delete from the area: COP2800, COP2812, and CTS 2102.
- Relocate existing courses to area 2a: COP1332, and COP2823.
- Relocate existing course to area 2b: COP1334
- Add: CTS1800 – Introduction to Web Page Development (4 credits)

2. Add: Two Concentration Options (Area 2):

A. Microsoft Technologies

- COP1332 – Introduction to Visual Basic (4 credits)
- COP2823 – ASP/Script Language Programming (4 credits) **or** CTS 2463 – C# Web Application Development (4 credits)
- CTS1437 – Microsoft SQL Administration (4 credits)
- CTS2433 – Microsoft SQL Implementation (4 credits)
- CGS2172 – Implementing a Commerce-Enabled Web Site (4 credits)

OR

B. Open Source Technologies

- COP1334 – Introduction to Object Oriented Programming C++ (4 credits)
- COP2842 – Developing Websites Using PHP/MYSQL (4 credits)
- COP2843 – Implementing Open-Source Database (4 credits)
- CTS2823 – Developing Internet Applications Using Apache (4 credits)
- CTS1111 – Linux Systems Administration (4 credits)

APPROVE_____ **OPPOSE**_____ **MORE INFORMATION**_____



CURRENT PROGRAM SHEET

Web Development Specialist
College Credit Certificate

C.I.P. (0511080103)

Total credits required for the degree is 36.

| Course | Course Title | Credits |
|---|--------------|--|
| <u>MAJOR CORE REQUIREMENTS – 36 Credits Required</u> | | |
| <input type="checkbox"/> | CGS 1060 | Introduction to Microcomputer Usage (4 credits) |
| <input type="checkbox"/> | COP 1332 | Introduction to Visual Basic Programming (4 credits) |
| <input type="checkbox"/> | COP 1334 | Introduction to C++ Programming (4 credits) |
| <input type="checkbox"/> | COP 2800 | Java Programming (4 credits) |
| <input type="checkbox"/> | COP 2812 | Extensible Markup Language Programming (XML) (4 credits) |
| <input type="checkbox"/> | COP 2822 | Web Page Design and Programming (4 credits) |
| <input type="checkbox"/> | COP 2823 | ASP/Script Language Programming (4 credits) |
| <input type="checkbox"/> | COP 2825 | Implementing an Internet Server (4 credits) |
| <input type="checkbox"/> | CTS 2102 | Operating System Principles (4 credits) |

Computer Competency: By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass

Or

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test**.

Additional Information:

A minimum cumulative grade point average of 2.0 is required for graduation.

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements rests with the student.



PROPOSED PROGRAM SHEET

Web Development Specialist
College Credit Certificate

C.I.P. (0511080103)

Total credits required for the degree is 36.

| Course | Course Title | Credits | |
|--|---|------------------------|------------------------------|
| MAJOR CORE REQUIREMENTS – 36 16 Credits Required | | | |
| CGS 1060 | Introduction to Microcomputer Usage | (4 credits) | |
| COP 1332 | Introduction to Visual Basic Programming | (4 credits) | (Shift to Option A) |
| COP 1334 | Introduction to C++ Programming | (4 credits) | (Shift to Option B) |
| COP 2800 | Java Programming | (4 credits) | (Remove From Program ONLY) |
| COP 2812 | Extensible Markup Language Programming (XML) | (4 credits) | (Remove From Program ONLY) |
| COP 2822 | Web Page Design and Programming | (4 credits) | |
| COP 2823 | ASP/Script Language Programming | (4 credits) | (Shift to Option A) |
| COP 2825 | Implementing an Internet Server | (4 credits) | |
| CTS 1800 | Introduction to Web Development | (4 credits) | (ADD Existing Course) |
| CTS 2102 | Operating System Principles | (4 credits) | (Remove From Program ONLY) |

ADD A NEW SECTION "PROGRAM REQUIREMENTS"

| Course | Course Title | Credits | |
|---|--|-------------|-----------------------|
| PROGRAM REQUIREMENTS – 20 Credits Required | | | |
| *Students Must Select ONE GROUP ONLY. Either Group A Or Group B. | | | |
| GROUP A: MICROSOFT TECHNOLOGIES | | | |
| CGS 2172 | Implementing a Commerce-Enabled Web Site | (4 credits) | (ADD Existing Course) |
| COP 1332 | Introduction to Visual Basic Programming | (4 credits) | (Shifted from MCR) |
| CTS 1437 | Microsoft SQL Administration | (4 credits) | (ADD Existing Course) |
| CTS 2433 | Microsoft SQL Implementation | (4 credits) | (ADD Existing Course) |
| COP 2823 | ASP/Script Language Programming | (4 credits) | (Shifted from MCR) |
| OR | | | |
| CTS 2463 | C# Web Application Development | (4 credits) | (ADD Existing Course) |

OR

| | | | |
|--|---|-------------|-----------------------|
| GROUP B: OPEN SOURCE TECHNOLOGIES | | | |
| COP 1334 | Introduction to C++ Programming | (4 credits) | (Shifted from MCR) |
| COP 2842 | Developing Websites Using PHP/MYSQL | (4 credits) | (ADD Existing Course) |
| COP 2843 | Implementing Open-Source Databases | (4 credits) | (ADD Existing Course) |
| CTS 1111 | Linux Systems Administration | (4 credits) | (ADD Existing Course) |
| CTS 2823 | Developing Internet Applications Using Apache | (4 credits) | (ADD Existing Course) |



NEW PROGRAM SHEET

Web Development Specialist College Credit Certificate

C.I.P. (0511080103)

Total credits required for the degree is 36.

| Course | Course Title | Credits |
|--|-------------------------------------|-------------|
| MAJOR CORE REQUIREMENTS – 16 Credits Required | | |
| CGS 1060 | Introduction to Microcomputer Usage | (4 credits) |
| COP 2822 | Web Page Design and Programming | (4 credits) |
| COP 2825 | Implementing an Internet Server | (4 credits) |
| CTS 1800 | Introduction to Web Development | (4 credits) |

PROGRAM REQUIREMENTS

***Students Must Select ONE GROUP ONLY. Either Group A Or Group B.**

GROUP A: MICROSOFT TECHNOLOGIES – 20 Credits Required

| | | |
|-----------|--|-------------|
| CGS 2172 | Implementing a Commerce-Enabled Web Site | (4 credits) |
| COP 1332 | Introduction to Visual Basic Programming | (4 credits) |
| CTS 1437 | Microsoft SQL Administration | (4 credits) |
| CTS 2433 | Microsoft SQL Implementation | (4 credits) |
| COP 2823 | ASP/Script Language Programming | (4 credits) |
| OR | | |
| CTS 2463 | C# Web Application Development | (4 credits) |

OR

GROUP B: OPEN SOURCE TECHNOLOGIES – 20 Credits Required

| | | |
|----------|---|-------------|
| COP 1334 | Introduction to C++ Programming | (4 credits) |
| COP 2842 | Developing Websites Using PHP/MYSQL | (4 credits) |
| COP 2843 | Implementing Open-Source Databases | (4 credits) |
| CTS 1111 | Linux Systems Administration | (4 credits) |
| CTS 2823 | Developing Internet Applications Using Apache | (4 credits) |

Computer Competency: By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass

Or

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test.**

Additional Information:

A minimum cumulative grade point average of 2.0 is required for graduation.

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements rests with the student.

2. Fine Arts

Course Deletion

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff.</u> <u>Term</u> |
|-------------------|---|----------------|---------------|----------------------------|
| MUS2334 | Basic Multi-Track Tape Recording & Studio Technique | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: This course provides instruction for composers and performers using basic recording studio equipment to produce their own musical recordings. Emphasis will be placed on line level monitoring and recording procedures in MIDI sequencing production. Pre requisites: MUC 2211 and MUM 2623C or permission of instructor. (2 hr. lecture; 2 hr. lab) (2 hr. lecture 2 hr. lab)

Curriculum Action Rationale: In response to the fee audit, the faculty has convened and requested to end-term this course. This course has not been offered since its inception date (1991-3). Please note: this course is not a major core requirement to fulfill any active program.

APPROVE_____ **OPPOSE**_____ **MORE INFORMATION**_____

3. School of Education

Change Existing Courses

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|-------------------------|----------------|---------------|------------------|
| EDG3321 | General Teaching Skills | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will learn human development theories, learning theories, and research based pedagogy as they apply to the teaching and learning process. The student will apply and incorporate principles and skills of effective teaching through a variety of instructional activities. (3 hr. lecture) Pre-requisites: EDF1005, and EME2040, and EEX2000, EDF2085,

Curriculum Action Rationale: To update course description and course competencies so that they are aligned with the Florida Department of Education. No change requested to existing course fee.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|-----------------------------------|----------------|---------------|------------------|
| EDG3443 | Classroom and Behavior Management | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will learn behavior management and intervention principles to create a learning environment for general and exceptional students that encourages positive interaction and effective communication. The student will learn strategies for observing, assessing, and modifying behavior, communicating with stakeholders, and structuring discipline. Fifteen hours of clinical experience are required (3 hr. lecture) Pre/Co-requisites: EDG3321.

Curriculum Action Rationale: To update course description and course competencies so that they are aligned with the Florida Department of Education. No change requested to existing course fee.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|---|----------------|---------------|------------------|
| EEX3071 | Teaching Exceptional & Diverse Populations In Inclusive Settings | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will learn the legal and ethical issues, how to address the needs of diverse learners, and the adaptations, accommodations, and modifications used in inclusive classrooms. The student will learn to make informed decisions in designing and adapting the curriculum for all students. Fifteen hours of clinical experience are required. (3 hr. lecture). Pre-requisites: EEX2000, Pre/Co-requisites: EDG3321.

Curriculum Action Rationale: To update course description and course competencies so that they are aligned with the Florida Department of Education. No change requested to existing course fee.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|---------------------------------|----------------|---------------|------------------|
| EEX4221 | Assessment in Special Education | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will study, analyze, and administer informal and formal assessments to students with special needs. The student will learn to prepare and present assessment data for use in instructional planning and developing individualized educational plans for students with disabilities. Fifteen hours of clinical experience are required. (3 hr. lecture). Pre-requisites: EDF4430, EDG3321

Curriculum Action Rationale: To update course description and course competencies so that they are aligned with the Florida Department of Education. No change requested to existing course fee.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|---|----------------|---------------|------------------|
| EME3430 | Instructional Technology in Mathematics and Science | 2 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: Student will learn to use to use knowledge of mathematics and science content to select appropriate technology tools for diverse populations in the secondary classroom. The student will utilize tools such as spreadsheets, statistical packages, graphing calculators, data-collection devices, probeware, virtual manipulatives, virtual labs, simulations, software, Internet resources, and assistive technologies. (2 hr. lecture) Pre-requisites: EME2040, Pre/Co-requisites: EEX3071, EDG3321.

Curriculum Action Rationale: To update course description and course competencies so that they are aligned with the Florida Department of Education. No change requested to existing course fee.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|---------------------------------|----------------|---------------|------------------|
| MAE4360 | Methods of Teaching Mathematics | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will learn to develop theoretical knowledge and skills that are essential for successful K-12 mathematics instruction. The student will design, implement, and assess mathematics instruction and curriculum utilizing the problem-solving approach in mathematics and research-based practices that accommodate the learning needs of a diverse population. Fifteen hours of clinical experience are required. Special fee. (3 hr. lecture) Pre-requisites: EDG3321, EDF4430.

Curriculum Action Rationale: To update course description and course competencies so that they are aligned with the Florida Department of Education Skills and Competencies in Science Education (Sixteenth Edition). No change requested to existing course fee

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|--|----------------|---------------|------------------|
| MAE4940 | Advanced Topics in Mathematics Education Practicum | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will learn to conduct classroom research. The student will use action research strategies to identify and address issues related to mathematics learning and implement research-based instructional practices that address diverse needs of students' in grades 6-12. Forty hours of clinical experience are required. Prerequisite: MAE 4360. Special fee. (3 hr. lecture). Pre-requisites: MAE4360.

Curriculum Action Rationale: Update course description to meet MDC guidelines and input Learning outcomes. No change to existing course fee.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|------------------------------------|----------------|---------------|------------------|
| RED3013 | Foundations of Reading Instruction | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will learn about reading instruction from birth to secondary levels. The student will learn theory and current research-based approaches. All aspects of the reading process are explored: phonemic awareness, phonics, vocabulary, fluency, oral language, and comprehension. Fifteen hours of clinical experience are required. Special fee. (3 hr. lecture) (3 hr. lecture). Pre/Co-requisites: EDG3321.

Curriculum Action Rationale: To update course description and course competencies so that they are aligned with the Florida Department of Education. No change requested to existing course fee.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|-----------------------------|----------------|---------------|------------------|
| SCE4362 | Methods of Teaching Science | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: Students will develop theoretical knowledge and skills that are essential for successful K-12 science instruction. The student will learn to design, implement, and assess science instruction and curriculum utilizing the inquiry method and research-based practices that accommodate the learning needs of a diverse population. Fifteen hours of clinical experience are required. Special fee. (3 hr. lecture). Pre-requisites: EDF4430.

Curriculum Action Rationale: To update course description and course competencies so that they are aligned with the Florida Department of Education Skills and Competencies in Science Education (Sixteenth Edition). No change requested to existing course fee.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|---|----------------|---------------|------------------|
| SCE4363 | Advanced Topics in Science Education Practicum | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will learn to conduct classroom research. The student will use action research strategies to identify and address issues related to science learning and students' science misconception in grades 6-12. Sixty hours of clinical experience are required. (3 hr. lecture). Pre-requisites: SCE4362, SCE3893.

Curriculum Action Rationale: To update course description and course competencies so that they are aligned with the Florida Department of Education Skills and Competencies in Science Education (Sixteenth Edition). This course does not have a fee.

APPROVE _____ **OPPOSE** _____ **MORE INFORMATION** _____

Add New Courses

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|--|----------------|---------------|------------------|
| EEX3102 | Language Development and Communication Disorders | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will learn normal language and speech development and characteristics and manifestations of major communication disorders. The student will identify and plan supportive strategies and accommodations for students with speech and language disorders. (3 hr. lecture). Pre-requisites: EDG3321, Pre/Co-requisites: TSL3XXX

Curriculum Action Rationale: PLEASE NOTE:THIS IS A NEW COURSE REQUEST. EFFECTIVE 2012-1. Course is aligned with the Florida Department of Education Skills and Competencies.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|--------------------------------|----------------|---------------|------------------|
| EEX4833 | Practicum in Special Education | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will plan, develop, and implement literacy strategies and pedagogic methods that meet the needs of students with diverse learning styles in grades K-12. The student will learn to utilize action research methodology, assessment principles, and remediation strategies to determine the effectiveness of a literacy strategy. Sixty hours of clinical experience are required. (3 hr. lecture). Pre/Co-requisites: RED4519.

Curriculum Action Rationale: State Revisions in Mandated Competencies. PLEASE NOTE:THIS IS A NEW COURSE REQUEST. EFFECTIVE 2012-1.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|---|----------------|---------------|------------------|
| EEX4XXXX | Instructional and Assistive Technology in Special Education | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will acquire a basic foundation of the use of technology in special education. The student will learn about the educational and assistive technologies (AT) used to support low and high incidence special education students and select the best technology applications for the classroom. (3 hr. lecture) Pre-requisites: EDG3321, EME2040, Pre/Co-requisites: EEX3071.

Curriculum Action Rationale: PLEASE NOTE:THIS IS A NEW COURSE REQUEST. EFFECTIVE 2012-1. Course is aligned with the Florida Department of Education Skills and Competencies.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|--|----------------|---------------|------------------|
| TSL3XXXX | ESOL I: Second Language Acquisition, Communication and Culture | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will learn to analyze and apply linguistic theories for first and second language acquisition and literacy development, and study language and its structure. The student will plan and implement curriculum, instruction, and assessment activities to meet the needs of culturally and linguistically diverse learners. Fifteen hours of clinical experience are required. (3 hr. lecture) Pre/Co-requisites: EDG3321.

Curriculum Action Rationale: State Mandated Changes. PLEASE NOTE:THIS IS A NEW COURSE REQUEST. EFFECTIVE 2012-1.

| <u>Course No.</u> | <u>Course Title</u> | <u>Credits</u> | <u>Campus</u> | <u>Eff. Term</u> |
|-------------------|--|----------------|---------------|------------------|
| TSL4311 | ESOL II: Methods of Teaching ESOL Students | 3 | 1,2,3,5,6,7,8 | 2012-1 |

Course Description: The student will learn to apply TESOL instructional methods and strategies, as well as, analyze, plan, design, and evaluate curriculum and materials. The student will learn to select, develop, and adapt assessment instruments, and examine standardized ESOL measurement tools. Fifteen hours of clinical experience are required. (3hr. lecture) (3 hr. lecture) Pre-requisites: TSL3XXX.

Curriculum Action Rationale: State Mandated Changes. PLEASE NOTE:THIS IS A NEW COURSE REQUEST. EFFECTIVE 2012-1.

APPROVE_____ **OPPOSE**_____ **MORE INFORMATION**_____

Program Changes

Executive Summary – Modifications to Program

Program Title: BS Secondary Science Education - Chemistry
Program Code: S4101
Department: Education
Effective Term: Fall 2012-1
Degree Type: Bachelor of Science
Affected Campuses: 1, 2, 3, 5, 6, 7, 8

Rationale: Modify program to:

- meet science pre-service teacher needs in teaching reading to secondary students; and
- address the new Florida Educator Accomplished Practice standards required by the FLDOE for teacher preparation.

Modification:

3. *Professional Education Core:*

- Delete: RED 3013 – Foundations of Reading Instruction (3 credits)
- Add: RED 3393 – Differentiated Instruction in Content Reading (3 credits)

4. **BS Courses :**

- Move: EME 3430(2 credits) to Upper Division Science Education Discipline Content Area

APPROVE _____ **OPPOSE** _____ **MORE INFORMATION** _____



MIAMI DADE COLLEGE SCHOOL OF EDUCATION

Bachelor of Science Degree Secondary Science Education – Chemistry Total credits required for the degree is 120

Upon completion of the Bachelor of Science Degree in Secondary Science Education in Chemistry program, the student will be eligible to obtain a Florida Educator Certification in Chemistry (grade 6-12).

GENERAL EDUCATION REQUIREMENTS

| Course | Course Title | Credits | Pre-/Co-Requisites |
|---|---|---------|---|
| Communications – 6 credits | | | |
| ENC 1101 | English Comp 1 | 3 | |
| ENC 1102 | English Comp 2 | 3 | Pre-req ENC 1101 or equivalent with a grade of “C” or better |
| Oral Communications – 3 credits | | | |
| Select three (3) credits from the following oral communications courses: | | | |
| LIT 2480 ¹ | Issues in Lit & Culture | 3 | |
| SPC 1026 | Fund of Speech Communication | 3 | |
| ENC 2106 | Advanced Communication Skills | 3 | |
| ¹ Note: Lit 2480 meets 3 of 9 required credits of international / diversity focus | | | |
| Humanities – 6 credits | | | |
| Students must take three (3) credits from Group A and three (3) credits from Group B: | | | |
| Group A | | | |
| ARH 1000 | Art Appreciation | 3 | |
| DAN 2100 | Dance Appreciation | 3 | |
| HUM 1020 | Humanities | 3 | |
| MUL 1010 | Music Appreciation | 3 | |
| PHI 2604 | Critical Thinking and Ethics | 3 | Pre-req ENC 1101 |
| Group B | | | |
| ARH 2740 | Cinema Appreciation | 3 | Pre-req HUM1020 |
| LIT 2120 | A Survey of World Literature | 3 | Pre-req ENC 1101, ENC 1102, or equivalent |
| MUL 2380 | Jazz & Pop Music in America | 3 | |
| PHI 2010 | Introduction to Philosophy | 3 | |
| THE 2000 | Theatre Appreciation | 3 | |
| Behavioral/ Social Sciences – 6 credits | | | |
| Students must take three (3) credits from Group A and three (3) credits from Group B: | | | |
| If student selects a 1000 level course from one group, they must select a 2000 level course from the other group. | | | |
| Group A (3 credits) | | | |
| ANT 2410 | Introduction to Cultural Anthropology | 3 | |
| DEP 2000 * | Human Growth and Development | 3 | * recommended by SOE faculty |
| ISS 1161 | The Individual in Society | 3 | |
| CLP1006 | Psychology of Personal Effectiveness | 3 | |
| PSY 2012 | Introduction to Psychology | 3 | |
| SYG 2000 | Introduction to Sociology | 3 | |
| Group B (3 credits) | | | |
| AMH 2010 | History of the U.S. to 1877 | 3 | |
| AMH 2020 | History of the U.S. since 1877 | 3 | |
| ECO 2013 | Principles of Economics | 3 | |
| ISS 1120 | The Social Environment | 3 | |
| POS 2041 | American Federal Government | 3 | |
| WOH 2012 | History of World Civilizations to 1715 | 3 | |
| WOH 2022 | History of World Civilization from 1715 | 3 | |
| Natural Science – 6 credits | | | |
| BSC 2010 | Principles of Biology | 3 | Pre/Co-req BSC 2010L, CHM 1045 |
| CHM 1045 | General Chemistry | 3 | Pre-req CHM 1025, or High school chemistry with a grade of “C” or better Co-req CHM 1045 L, MAC 1105 |
| Mathematics – 6 credits | | | |
| Any 6 credits excluding labs: | | | |
| MAC | MAD | MAP | MAS MGF MTG 2204 QMB 2100 STA 2023 |
| General Education Elective - 3 credits | | | |
| EDF 1005* | Introduction to Education | 3 | |
| Education Common Prerequisites – 9 credits | | | |

| | | | | |
|-------------------------|--|---|---------|----------|
| EDG 2701 * ² | Diverse Populations | 3 | | |
| EEX 2000 * ² | Introduction to Special Education | 3 | | |
| EME 2040 | Introduction to Educational Technology | 3 | Pre-req | EDF 1005 |

²Note: EDG 2701 and EEX 2000 meet 6 of 9 required credits of international/diversity focus

* Course requires a minimum of 15 hours of field experience

Program Prerequisites – 16 credits

| | | | | |
|-----------|--|---|-------------|--------------------|
| BSC 2010L | Principles of Biology Lab | 2 | Pre-/Co-req | CHM1045L/BSC 2010 |
| BSC 2011 | Principles of Biology 2 | 3 | Pre-/Co-req | BSC2010/BSC 2011L |
| BSC 2011L | Principles of Biology 2 Lab | 2 | Co-req | BSC 2011 |
| CHM 1045L | General Chemistry Lab | 2 | Co-req | CHM 1045 |
| CHM 1046 | General Chemistry and Qualitative Analysis | 3 | Pre-/Co-req | CHM 1045/CHM1046L |
| CHM 1046L | General Chemistry and Qualitative Analysis Lab | 2 | Pre-/Co-req | CHM 1045L/CHM 1046 |

Professional Education Core - 18 credits

| | | | | |
|------------|--|---|-------------|--|
| EDG 3321 * | General Teaching Skills | 3 | Pre-req | EDF 1005, EDG 2701, EEX 2000, EME 2040 |
| EDF 4430 | Measurement & Assessment in Education | 3 | Pre-/Co-req | EDG 3321 |
| EDG 3411 | Classroom Management for Comm. K-12 | 3 | Pre-/Co-req | EDF 3111 |
| EEX 3071 * | Teaching Exceptional and Diverse Populations in Inclusive Settings | 3 | Pre-req | EEX 2000 |

RED 3013* Foundations of Reading Instruction 3 Pre-req ~~EDG 3321~~ (Remove from Program Only)

RED 3393* Differentiated Instruction in Content Reading 3 Pre-req departmental approval

TSL 4324C* ESOL Strategies for Content Area Teachers 3 Pre-req EDG 3321

*Course requires a minimum of 15 hours of field experience

Discipline Content – 29 credits

| | | | | |
|-----------|--|---|--------------|---|
| BCH 3023 | Introduction to Biochemistry | 3 | Pre-/Co-req | CHM 2000, or CHM 2210 and CHM 2211/BCH 3023 L |
| BCH 3023L | Introduction to Biochemistry Lab | 1 | Pre-/Co-req | CHM2200L or CHM 2210L and CHM2211L/BCH 3023; |
| CHM 2200 | Survey of Organic Chemistry | 3 | Pre-/Co- req | CHM 1046/CHM 2200L |
| CHM 2200L | Survey of Organic Chemistry Lab | 2 | Pre-/Co-req | CHM 1046L./CHM 2200 |
| CHM 3120 | Introduction to Analytical Chemistry | 3 | Pre-/Co- req | CHM 1046, CHM 3120 L, CHM 1046 L |
| CHM 3120L | Introduction to Analytical Chemistry Lab | 2 | Pre-/Co- req | CHM 1046L, CHM 3120 |
| CHM 3610 | Advanced Inorganic Chemistry | 3 | Pre- req | CHM 1046 |

EME 3430 Instructional Technology in Math and Science 2 Pre-req departmental approval (Moved from Program Prerequisite)

ISC 4534C Authentic Inquiry in Science 3 Pre-req CHM 1046

SCE 3893 Teaching and Learning the Nature of Science 3 Pre-req departmental approval

SCE 4362* Methods of Teaching Science 1 3 Pre-req departmental approval

SCE 4363** Advanced Topics in Science Education Practicum 3 Pre-req SCE 4362

*Course requires a minimum of 15 hours of field experience

**Course requires a minimum of 40 hours of field experience

Student Teaching/Internship – 12 credits

SCE 4945*** Student Teaching/Student Internship-Science 9 Co-req SCE4943 and departmental approval

SCE 4943*** Seminar in Science Education 3 Co-req SCE4945 and departmental approval

*** Course requires full-time field experience

Computer Competency: Upon completion of the 16th earned college level credit (excluding EAP and college preparatory courses), a student must take the computer competency test and pass; **or** by the 31st earned college level credit (excluding EAP and college preparatory courses), a student must pass CGS 1060, an equivalent continuing education or vocational credit course or retest with a passing score on the computer competency test.

Courses taken to fulfill the general education requirements must be completed with a grade of “C” or better.

To be admitted to the baccalaureate degree in Education a student must have completed an A.A. degree **or** at least earned 60 semester credit hours from an accredited college or university with a minimum cumulative 2.5 Grade Point Average (GPA) on a 4.0 scale and present passing scores on all sections of the CLAST **or** the General Knowledge Test (GKT) without exceptions or waivers.

Fingerprint Requirement: Most courses in the teacher education program require school site-based field experiences, culminating in a full-time 12-week internship. School districts require a criminal background check for students completing service hours, field placement, practicum, or internships. Fingerprinting and FBI background check procedures are at the applicant’s expense. Students with felony arrests may wish to consider these requirements carefully and, if necessary, seek advice from an advisor in the School of Education before applying to programs in the School of Education. Students without valid Social Security number will not be eligible for placement in the school district. The Director of Clinical Supervision and Internship Placement will assist students through these requirements.

A minimum of 30 semester hours of 3000-4000 level courses must be taken. Courses must be completed with a grade of “C” or better.

Foreign Language: Students admitted to the baccalaureate degree in Education without meeting the foreign language admission requirement of at least 2 courses of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation. Foreign language courses taken at the college level may be used to meet the diversity requirement.

Executive Summary – Modifications to Program

Program Title: BS Secondary Science Education – Earth/Space Science
Program Code: S4102
Department: Education
Effective Term: Fall 2012-1
Degree Type: Bachelor of Science
Affected Campuses: 1, 2, 3, 5, 6, 7, 8

Rationale: Modify program to:

- meet science pre-service teacher needs in teaching reading to secondary students; and
- address the new Florida Educator Accomplished Practice standards required by the FLDOE for teacher preparation.

Modification:

1. ***Professional Education Core:***

- Delete: RED 3013 – Foundations of Reading Instruction (3 credits)
- Add: RED 3393 – Differentiated Instruction in Content Reading (3 credits)

2. **BS Courses :**

- Move: EME 3430 (2 credits) to Upper Division Science Education Discipline Content Area

APPROVE_____ **OPPOSE**_____ **MORE INFORMATION**_____



**MIAMI DADE COLLEGE
SCHOOL OF EDUCATION**

**Bachelor of Science Degree
Secondary Science Education – Earth/ Space Science
Total credits required for the degree is 120**

Upon completion of the Bachelor of Science Degree in Secondary Science Education in Earth/ Space Science program, the student will be eligible to obtain a Florida Educator Certification in Earth/ Space Science (grade 6-12).

GENERAL EDUCATION REQUIREMENTS

| Course | Course Title | Credits | Pre-/Co-Requisites |
|-----------------------------------|----------------|---------|--|
| Communications – 6 credits | | | |
| ENC 1101 | English Comp 1 | 3 | |
| ENC 1102 | English Comp 2 | 3 | Pre-req ENC 1101 or equivalent with a grade of "C" or better |

Oral Communications – 3 credits

Select three (3) credits from the following oral communications courses:

| | | | |
|-----------------------|-------------------------------|---|--|
| LIT 2480 ¹ | Issues in Lit & Culture | 3 | |
| SPC 1026 | Fund of Speech Communication | 3 | |
| ENC 2106 | Advanced Communication Skills | 3 | |

¹ Note: Lit 2480 meets 3 of 9 required credits of international / diversity focus

Humanities – 6 credits

Students must take three (3) credits from Group A and three (3) credits from Group B:

Group A

| | | | |
|----------|------------------------------|---|------------------|
| ARH 1000 | Art Appreciation | 3 | |
| DAN 2100 | Dance Appreciation | 3 | |
| HUM 1020 | Humanities | 3 | |
| MUL 1010 | Music Appreciation | 3 | |
| PHI 2604 | Critical Thinking and Ethics | 3 | Pre-req ENC 1101 |

Group B

| | | | |
|----------|------------------------------|---|---|
| ARH 2740 | Cinema Appreciation | 3 | Pre-req HUM1020 |
| LIT 2120 | A Survey of World Literature | 3 | Pre-req ENC 1101, ENC 1102, or equivalent |
| MUL 2380 | Jazz & Pop Music in America | 3 | |
| PHI 2010 | Introduction to Philosophy | 3 | |
| THE 2000 | Theatre Appreciation | 3 | |

Behavioral/ Social Sciences – 6 credits

Students must take three (3) credits from Group A and three (3) credits from Group B:

If student selects a 1000 level course from one group, a 2000 level course must be selected from the other group.

Group A (3 credits)

| | | | |
|------------|---------------------------------------|---|------------------------------|
| ANT 2410 | Introduction to Cultural Anthropology | 3 | |
| DEP 2000 * | Human Growth and Development | 3 | * recommended by SOE faculty |
| ISS 1161 | The Individual in Society | 3 | |
| CLP 1006 | Psychology of Personal Effectiveness | 3 | |
| PSY 2012 | Introduction to Psychology | 3 | |
| SYG 2000 | Introduction to Sociology | 3 | |

Group B (3 credits)

| | | | |
|----------|---|---|--|
| AMH 2010 | History of the U.S. to 1877 | 3 | |
| AMH 2020 | History of the U.S. since 1877 | 3 | |
| ECO 2013 | Principles of Economics | 3 | |
| ISS 1120 | The Social Environment | 3 | |
| POS 2041 | American Federal Government | 3 | |
| WOH 2012 | History of World Civilizations to 1715 | 3 | |
| WOH 2022 | History of World Civilization from 1715 | 3 | |

Natural Science – 6 credits

| | | | | |
|----------|---------------------------|---|------------|---|
| BSC 1005 | General Education Biology | 3 | | |
| CHM 1045 | General Chemistry | 3 | Pre-/Coreq | CHM 1025 or High School Chemistry with a grade of “C” or better./CHM1045L |

Mathematics – 6 credits

Any 6 credits excluding labs:

| | | | | | | | |
|-----|-----|-----|-----|-----|----------|----------|----------|
| MAC | MAD | MAP | MAS | MGF | MTG 2204 | QMB 2100 | STA 2023 |
|-----|-----|-----|-----|-----|----------|----------|----------|

General Education Elective - 3 credits

| | | | | |
|---|--|---|---------|----------|
| EDF 1005* | Introduction to Education | 3 | | |
| Education Common Prerequisites – 9 credits | | | | |
| EDG 2701* ² | Diverse Populations | 3 | | |
| EEX 2000 * ² | Introduction to Special Education | 3 | | |
| EME 2040 | Introduction to Educational Technology | 3 | Pre-req | EDF 1005 |

²Note: EDG 2701 and EEX 2000 meet 6 of 9 required credits of international/diversity focus

* Course requires a minimum of 15 hours of field experience

Program Prerequisites – 17 15 credits

| | | | | |
|-----------|--|---|------------|--|
| CHM 1045L | General Chemistry Lab | 2 | Pre/Co-req | CHM 1025 or High School Chemistry with a grade of “C” or better./CHM1045 |
| CHM 1046 | General Chemistry and Qualitative Analysis | 3 | Pre/Co-req | MAC 1105/CHM1046L |
| CHM 1046L | General Chemistry and Qualitative Analysis Lab | 2 | Pre/Co-req | CHM 1045, 1045L, MAC1105/ CHM 1046 |
| GLY 1010 | Physical Geology | 3 | | GLY 1010L |
| GLY 1010L | Physical Geology Lab | 1 | Co-req | GLY 1010 |
| GLY 1100 | Historical Geology | 3 | Co-req | GLY 1100L |
| GLY 1100L | Historical Geology Lab | 1 | Co-req | GLY 1100 |

Professional Education Core - 18 credits

| | | | | |
|-----------|--|---|-------------|--|
| EDG 3321* | General Teaching Skills | 3 | Pre-req | EDF 1005, EDG 2701, EEX 2000, EME 2040 |
| EDF 4430 | Measurement & Assessment in Education | 3 | Pre-/Co-req | EDG 3321 |
| EDG 3411 | Classroom Management for Comm. K-112 | 3 | Pre-/Co-req | EDG 3321 |
| EEX 3071* | Teaching Exceptional and Diverse Populations in Inclusive Settings | 3 | Pre-req | EEX 2000 |

RED 3013* Foundations of Reading Instruction 3 ~~Pre-req~~ EDG3321 (Remove from Program Only)

| | | | | |
|------------|---|---|---------|---------|
| RED 3393* | Differentiated Instruction in Content Reading | 3 | Pre-req | EDG3321 |
| TSL 4324C* | ESOL Strategies for Content Area Teachers | 3 | Pre-req | EDG3321 |

*Course requires a minimum of 15 hours of field experience

Discipline Content – 28 30 credits

| | | | | |
|-----------------|---|----------|----------------|--|
| EME 3430 | Instructional Technology in Math and Science | 2 | Pre-req | departmental approval (Moved from Program Prerequisite) |
| GLY 4700C | Geomorphology | 4 | Pre-req | GLY 1010, GLY 1100 |
| ISC 4534C | Authentic Inquiry in Science | 3 | Pre-req | CHM1046 |
| MET 3702 | General Meteorology | 3 | Co-req | MET 3702L |
| MET 3702L | General Meteorology Lab | 1 | Co-req | MET 3702 |
| OCE 3014 | Oceanography | 3 | Co-req | OCE 3014L |
| OCE 3014L | Oceanography Lab | 2 | Co-req | OCE 3014 |
| PHY 1025 | Basic Physics | 3 | | |
| SCE 3893 | Teaching and Learning the Nature of Science | 3 | Pre-req | departmental approval |
| SCE 4362* | Methods of Teaching Science | 3 | Pre-req | departmental approval |
| SCE 4363** | Advanced Topics in Science Education Practicum | 3 | Pre-req | SCE 4362 |

*Course requires a minimum of 15 hours of field experience

**Course requires a minimum of 40 hours of field experience

Student Teaching/Internship – 12 credits

| | | | | |
|-------------|---|---|--------|------------------------------------|
| SCE 4945*** | Student Teaching/Student Internship-Science | 9 | Co-req | SCE 4943 and departmental approval |
| SCE 4943*** | Seminar | 3 | Co-req | SCE 4945 and departmental approval |

*** Course requires full-time field experience

Computer Competency: Upon completion of the 16th earned college level credit (excluding EAP and college preparatory courses), a student must take the computer competency test and pass; **or** by the 31st earned college level credit (excluding EAP and college preparatory courses), a student must pass CGS 1060, an equivalent continuing education or vocational credit course or retest with a passing score on the computer competency test.

Courses taken to fulfill the general education requirements must be completed with a grade of “C” or better.

To be admitted to the Baccalaureate Degree in Education a student must have completed an A.A. degree **or** at least earned 60 semester credit hours from an accredited college or university with a minimum cumulative 2.5 Grade Point Average (GPA) on a 4.0 scale and present passing scores on all sections of the CLAST **or** the General Knowledge Test (GKT) without exceptions or waivers.

Fingerprint Requirement: Most courses in the teacher education program require school site-based field experiences, culminating in a full-time 12-week internship. School districts require a criminal background check for students completing service hours, field placement, practicum, or internships. Fingerprinting and FBI background check procedures are at the applicant’s expense. Students with felony arrests may wish to consider these requirements carefully and, if necessary, seek advice from an advisor in the School of Education before applying to programs in the School of Education. Students without a valid Social Security number will not be eligible for placement in the school district. The Director of Clinical Supervision and Internship Placement will assist students through these requirements.

A minimum of 30 semester hours of 3000-4000 level courses must be taken. Courses must be completed with a grade of “C” or better.

Foreign Language: Students admitted to the baccalaureate degree in Education without meeting the foreign language admission requirement of at least 2 courses of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation. Foreign language courses taken at the college level may be used to meet the diversity requirement.

Executive Summary – Modifications to Existing Program

Program Title: BS Secondary Science Education – Biology
Program Code: S4100
Department: Education
Effective Term: Fall 2012-1
Degree Type: Bachelor of Science
Affected Campuses: 1, 2, 3, 5, 6, 7, 8

Rationale: Modify program to:

- meet science pre-service teacher needs in teaching reading to secondary students; and
- address the new Florida Educator Accomplished Practice standards required by the FLDOE for teacher preparation.

Modification:

1. ***Professional Education Core:***

- Delete: RED 3013 – Foundations of Reading Instruction (3 credits)
- Add: RED 3393 – Differentiated Instruction in Content Reading (3 credits)

2. **BS Courses :**

- Move: EME 3430(2credits) to Upper Division Science Education Discipline Content Area

APPROVE _____ **OPPOSE** _____ **MORE INFORMATION** _____



MIAMI DADE COLLEGE SCHOOL OF EDUCATION

Bachelor of Science Degree Secondary Science Education – Biology Total credits required for the degree is 120

Upon completion of the Bachelor of Science Degree in Secondary Science Education in Biology program, the student will be eligible to obtain a Florida Educator Certification in Biology (grade 6-12).

GENERAL EDUCATION REQUIREMENTS

| Course | Course Title | Credits | Pre-/Co-Requisites |
|-----------------------------------|----------------|---------|--|
| Communications – 6 credits | | | |
| ENC 1101 | English Comp 1 | 3 | |
| ENC 1102 | English Comp 2 | 3 | Pre-req ENC 1101 or equivalent with a grade of “C” or better |

Oral Communications – 3 credits

Select three (3) credits from the following oral communications courses:

| | | | |
|-----------------------|-------------------------------|---|--|
| LIT 2480 ¹ | Issues in Lit & Culture | 3 | |
| SPC 1026 | Fund of Speech Communication | 3 | |
| ENC 2106 | Advanced Communication Skills | 3 | |

¹ Note: Lit 2480 meets 3 of 9 required credits of international / diversity focus

Humanities – 6 credits

Students must take three (3) credits from Group A and three (3) credits from Group B:

Group A

| | | | |
|----------|------------------------------|---|------------------|
| ARH 1000 | Art Appreciation | 3 | |
| DAN 2100 | Dance Appreciation | 3 | |
| HUM 1020 | Humanities | 3 | |
| MUL 1010 | Music Appreciation | 3 | |
| PHI 2604 | Critical Thinking and Ethics | 3 | Pre-req ENC 1101 |

Group B

| | | | |
|----------|------------------------------|---|---|
| ARH 2740 | Cinema Appreciation | 3 | Pre-req HUM1020 |
| LIT 2120 | A Survey of World Literature | 3 | Pre-req ENC 1101, ENC 1102, or equivalent |
| MUL 2380 | Jazz & Pop Music in America | 3 | |
| PHI 2010 | Introduction to Philosophy | 3 | |
| THE 2000 | Theatre Appreciation | 3 | |

Behavioral/ Social Sciences – 6 credits

Students must take three (3) credits from Group A and three (3) credits from Group B:

If a 1000 level course is selected from one group, a 2000 level course must be selected from the other group.

Group A (3 credits)

| | | | |
|------------|---------------------------------------|---|------------------------------|
| ANT 2410 | Introduction to Cultural Anthropology | 3 | |
| DEP 2000 * | Human Growth and Development | 3 | * recommended by SOE faculty |
| ISS 1161 | The Individual in Society | 3 | |
| CLP 1006 | Psychology of Personal Effectiveness | 3 | |
| PSY 2012 | Introduction to Psychology | 3 | |
| SYG 2000 | Introduction to Sociology | 3 | |

Group B (3 credits)

| | | | |
|----------|---|---|--|
| AMH 2010 | History of the U.S. to 1877 | 3 | |
| AMH 2020 | History of the U.S. since 1877 | 3 | |
| ECO 2013 | Principles of Economics | 3 | |
| ISS 1120 | The Social Environment | 3 | |
| POS 2041 | American Federal Government | 3 | |
| WOH 2012 | History of World Civilizations to 1715 | 3 | |
| WOH 2022 | History of World Civilization from 1715 | 3 | |

Natural Science – 6 credits

*recommended by SOE and Natural Science faculty

| | | | |
|----------|------------------------|---|--|
| BSC 2010 | Principles of Biology* | 3 | Pre/Co-req BSC 2010L, CHM 1045 |
| CHM 1045 | General Chemistry* | 3 | Pre-/Co-req CHM 1025 or high school chemistry with a grade of “C” or better; CHM 1045L, MAC 1105 |

Mathematics – 6 credits

Any 6 credits excluding labs:

| | | | | | | | |
|-----|-----|-----|-----|-----|----------|----------|----------|
| MAC | MAD | MAP | MAS | MGF | MTG 2204 | QMB 2100 | STA 2023 |
|-----|-----|-----|-----|-----|----------|----------|----------|

Students are encouraged to take the appropriate pre-requisites to meet Natural Science requirements

General Education Elective - 3 credits

EDF 1005* Introduction to Education 3

Education Common Prerequisites – 9 credits

EDG 2701*² Diverse Populations 3
 EEX 2000*² Introduction to Special Education 3
 EME 2040 Introduction to Educational Technology 3 Pre-req CGS 1060 or computer competency

²Note: EDG 2701 and EEX 2000 meet 6 of 9 required credits of international/diversity focus

* Course requires a minimum of 15 hours of field experience

Program Prerequisites – 1614 credits

BSC 2010L Principles of Biology Lab 2 Pre-/Co-req CHM1045L/BSC 2010
 BSC 2011 Principles of Biology 2 3 Pre-/Co-req BSC2010/BSC 2011L
 BSC 2011L Principles of Biology 2 Lab 2 Co-req BSC 2011
 CHM 1045L General Chemistry Lab 2 Co-req CHM 1045
 CHM 1046 General Chemistry and Qualitative Analysis 3 Pre-/Co-req CHM 1045/CHM1046L
 CHM 1046L General Chemistry and Qualitative Analysis Lab 2 Pre-/Co-req CHM 1045L/CHM 1046

Professional Education Core - 18 credits

EDG 3321* General Teaching Skills 3 Pre-req EDF 1005, EDG 2701, EEX 2000, EME 2040
 EDF 4430 Measurement & Assessment in Education 3 Pre-/Co-req EDG 3321
 EDF 3443 Classroom Management for Regular and Exceptional Students 3 Pre-req EDG3321
 EEX 3071* Teaching Exceptional and Diverse Populations in Inclusive Settings 3 Pre-req EDF2085 and EEX 2000

RED 3013* Foundations of Reading Instruction 3 Pre-req ~~EDG 3321 (Remove From Program Only)~~

RED 3393* Differentiated Instruction in Content Reading 3 Pre-req departmental approval

TSL 4324C* ESOL Strategies for Content Area Teachers 3 Pre-req EDG 3321

*Course requires a minimum of 15 hours of field experience

Discipline Content – 29 31 credits

BCH 3023 Introduction to Biochemistry 3 Pre-/Co-req CHM 2000, or CHM 2210 and CHM 2211/BCH 3023 L
 BCH 3023L Introduction to Biochemistry Lab 1 Pre-/Co-req CHM2200L or CHM 2210L and CHM2211L/BCH 3023;
 CHM 2200 Survey of Organic Chemistry 3 Pre-/Co-req CHM 1046/CHM 2200L
 CHM 2200L Survey of Organic Chemistry Lab 2 Pre-/Co-req CHM 1046L./CHM 2200
 MCB 2010 Microbiology 3 Pre-/Co-req BSC 2010, BSC 2010L, BSC 2011
EME 3430 Instructional Technology in Math and Science 2 Pre-req departmental approval (Moved From Program Prerequisite)
 MCB 2010L Microbiology Lab 2 Pre-/Co-req BSC 2010L./MCB 2010
 PCB 3043 Foundations of Ecology 3 Pre-/Co-req BSC2011 and BSC 2011L
 PCB 3060 Principles of Genetics 3 Pre-/Co-req BSC2010 and BSC2010L
 SCE 3893* Teaching and Learning the Nature of Science 3 Pre-req departmental approval
 SCE 4362* Methods of Teaching Science 3 Pre-req departmental approval
 SCE 4363** Advanced Topics in Science Education Practicum 3 Pre-req SCE4362

*Course requires a minimum of 15 hours of field experience

**Course requires a minimum of 40 hours of field experience

Student Teaching/Internship – 12 credits

SCE 4945*** Student Teaching/Student Internship-Science 9 Co-req SCE 4943 and departmental approval
 SCE 4943*** Seminar in Science Education 3 Co-req SCE 4945 and departmental approval

*** Course requires full-time field experience

Computer Competency: Upon completion of the 16th earned college level credit (excluding EAP and college preparatory courses), a student must take the computer competency test and pass; **or** by the 31st earned college level credit (excluding EAP and college preparatory courses), a student must pass CGS 1060, an equivalent continuing education or vocational credit course or retest with a passing score on the computer competency test.

Courses taken to fulfill the general education requirements must be completed with a grade of “C” or better.

To be admitted to the Baccalaureate Degree in Education a student must have completed an A.A. degree **or** at least earned 60 semester credit hours from an accredited college or university with a minimum cumulative 2.5 Grade Point Average (GPA) on a 4.0 scale and present passing scores on all sections of the CLAST **or** the General Knowledge Test (GKT) without exceptions or waivers.

Fingerprint Requirement: Most courses in the teacher education program require school site-based field experiences, culminating in a full-time 12-week internship. School districts require a criminal background check for students completing service hours, field placement, practicum, or internships. Fingerprinting and FBI background check procedures are at the applicant’s expense. Students with felony arrests may wish to consider these requirements carefully and, if necessary, seek advice from an advisor in the School of Education before applying to programs in the School of Education. Students without a valid Social Security number will not be eligible for placement in the school district. The Director of Clinical Supervision and Internship Placement will assist students through these requirements.

A minimum of 30 semester hours of 3000-4000 level courses must be taken. Courses must be completed with a grade of “C” or better.

Foreign Language: Students admitted to the baccalaureate degree in Education without meeting the foreign language admission requirement of at least 2 courses of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation. Foreign language courses taken at the college level may be used to meet the diversity requirement.

Executive Summary – Modifications to Existing Program

Program Title: BS Secondary Mathematics Education
Program Code: S4200
Department: Education
Effective Term: Fall 2012-1
Degree Type: Bachelor of Science
Affected Campuses: 1, 2, 3, 5, 6, 7, 8

Rationale: Modify program to:

- meet mathematics pre-service teacher needs in teaching reading to secondary students; and
- address the new Florida Educator Accomplished Practice standards required by the FLDOE for teacher preparation.

Modification:

1. *Professional Education Core:*

- Delete: RED 3013 – Foundations of Reading Instruction (3 credits)
- Add: RED 3393 – Differentiated Instruction in Content Reading (3 credits)

APPROVE _____ **OPPOSE** _____ **MORE INFORMATION** _____



B.S. - Secondary Mathematics Education

CIP: 1101313111 S4200

Total credits required for the degree is 120

Upon completion of the Bachelor of Science Degree in Secondary Mathematics Education program, the student will be eligible to obtain a Florida Educator Certification in Mathematics (grade 6-12).

| Course | Course Title | Credits | Pre-/Co-Requisites |
|-----------------------------------|----------------|---------|--|
| Communications – 6 credits | | | |
| ENC 1101 | English Comp 1 | 3 | |
| ENC 1102 | English Comp 2 | 3 | Pre-req ENC 1101 or equivalent with a grade of “C” or better |

Oral Communications – 3 credits

Select three (3) credits from the following oral communications courses:

| | | | |
|-----------------------|-------------------------------|---|--|
| LIT 2480 ¹ | Issues in Lit & Culture | 3 | |
| SPC 1026 | Fund of Speech Communication | 3 | |
| ENC 2106 | Advanced Communication Skills | 3 | |

¹ Note: Lit 2480 meets 3 of 9 required credits of international / diversity focus

Humanities – 6 credits

Students must take three (3) credits from Group A and three (3) credits from Group B:

Group A

| | | | |
|----------|------------------------------|---|------------------|
| ARH 1000 | Art Appreciation | 3 | |
| DAN 2100 | Dance Appreciation | 3 | |
| HUM 1020 | Humanities | 3 | |
| MUL 1010 | Music Appreciation | 3 | |
| PHI 2604 | Critical Thinking and Ethics | 3 | Pre-req ENC 1101 |

Group B

| | | | |
|----------|------------------------------|---|---|
| ARH 2740 | Cinema Appreciation | 3 | Pre-req HUM1020 |
| LIT 2120 | A Survey of World Literature | 3 | Pre-req ENC 1101, ENC 1102, or equivalent |
| MUL 2380 | Jazz & Pop Music in America | 3 | |
| PHI 2010 | Introduction to Philosophy | 3 | |
| THE 2000 | Theatre Appreciation | 3 | |

Behavioral/ Social Sciences – 6 credits

Students must take three (3) credits from Group A and three (3) credits from Group B:

If student selects a 1000 level course from one group, a 2000 level course must be selected from the other group.

Group A (3 credits)

| | | | |
|------------|---------------------------------------|---|------------------------------|
| ANT 2410 | Introduction to Cultural Anthropology | 3 | |
| DEP 2000 * | Human Growth and Development | 3 | * recommended by SOE faculty |
| ISS 1161 | The Individual in Society | 3 | |
| CLP 1006 | Psychology of Personal Effectiveness | 3 | |
| PSY 2012 | Introduction to Psychology | 3 | |
| SYG 2000 | Introduction to Sociology | 3 | |

Group B (3 credits)

| | | | |
|----------|---|---|--|
| AMH 2010 | History of the U.S. to 1877 | 3 | |
| AMH 2020 | History of the U.S. since 1877 | 3 | |
| ECO 2013 | Principles of Economics | 3 | |
| ISS 1120 | The Social Environment | 3 | |
| POS 2041 | American Federal Government | 3 | |
| WOH 2012 | History of World Civilizations to 1715 | 3 | |
| WOH 2022 | History of World Civilization from 1715 | 3 | |

Natural Science – 6 credits

Students must take three (3) credits from Life Sciences and three (3) credits from Physical Sciences, excluding labs.

| | | | |
|-------------------|--|---|--|
| Life Sciences | BOT, BSC, OCB, PCB, ZOO | 3 | |
| Physical Sciences | AST, CHM, ESC, GLY, MET, OCE, PHY, PSC | 3 | |

Mathematics – 6 credits

| | | | |
|----------|---------------------------------------|---|--|
| MAC 1147 | Pre-Calculus, Algebra, & Trigonometry | 5 | Pre-req permission MAC 1105 with a grade of “C” or better or departmental permission |
| STA 2023 | Statistical Methods | 3 | Pre-req permission MAC 1105 with a grade of “C” or better or departmental permission |

*the additional 2 credit hours will be counted as Elective credits within the program prerequisite credits

General Education Elective - 3 credits

EEX 2000* Introduction to Special Education 3

Education Common Prerequisites – 9 credits

EDG 2701*² Diverse Populations 3
 EDF 1005*² Introduction to Education 3 Pre-req EDF 1005
 EME 2040 Introduction to Educational Technology 3 Pre-req CGS 1060 or computer competency exam

²Note: EDG 2701 and EEX 2000 meet 6 of 9 required credits of international/diversity focus

* Course requires a minimum of 15 hours of field experience

Program Prerequisites – 15 credits

MAC 1147* Pre-Calculus, Algebra, & Trigonometry GE (2) Pre-req MAC 1105 with a grade of “C” or better or departmental permission
 MAC 2311 Calculus and Analytical Geometry 1 5 Pre-req MAC 1114 and MAC 1140 or MAC 1147 with a grade of “C” or better or departmental permission
 MAC 2312 Calculus and Analytical Geometry 2 4 Pre-req MAC 2311 with a grade of “C” or better
 MAC 2313 Calculus and Analytical Geometry 3 4 Pre-req MAC 2312 with a grade of “C” or better

*2credit hours of Mathematics (Overage from Gen. Ed. requirements) will be counted as program pre-requisite credits.

Professional Education Core - 18 credits

EDF 4430 Measurement & Assessment in Education 3 Pre-/Co-req EDG 3321
 EDG 3321 General Teaching Skills 3 Pre-req EDF 1005, EDG 2701, EEX 2000, EME 2040
 EDG 3411* Classroom Management for Regular and Exceptional Students 3
 EEX 3071* Teaching Exceptional and Diverse Students in Inclusive Settings 3 Pre-req EDG2701, EEX 2000

RED 3013* Foundations of Reading Instruction 3 Pre-req EDG 3321
 RED 3393* Differentiated Instruction for Content Reading 3 Pre-req departmental approval
 TSL 4324C* ESOL Strategies for Content Area Teachers 3 Pre-req EDG 3321

*Course requires a minimum of 15 hours of field experience

Discipline Content – 30 credits

EME 3410 Instructional Technology in Math and Science 2 Pre-req Departmental permission
 MAD 3107 Discrete Structures 3 Pre-req MAC 2312 with a “C” or better or equivalent
 MAE 4360* Methods of Teaching Mathematics 3 Pre-req EDF 4430, EDG 3321
 MAE 4940** Advanced Topics in Mathematics Education Practicum 3 Pre-req MAE 4360
 MAP 2302 Introduction to Differential Equations 3 Pre-req MAC 2312 with a “C” or better or equivalent
 MAS 3105 Linear Algebra 3 Pre-req MAC 2312 with a “C” or better or equivalent
 MAS 3301 Algebraic Structures 3 Pre-req MAC 2312 with a “C” or better or equivalent
 MAS 4203 Number Theory 3 Pre-req MAC 2312 with a “C” or better or equivalent
 MHF 4404 History of Mathematics 3 Pre-req MAC 2312 with a “C” or better or equivalent
 MTG 3214 Euclidean Geometry 4 Pre-req MAC 1105 with a grade of “C” or better or departmental permission

*Course requires a minimum of 15 hours of field experience

**Course requires a minimum of 40 hours of field experience

Student Teaching/Internship – 12 credits

MAE 4942 Seminar in Mathematics 3 Pre-req/Co-req all coursework and state exams completed and passed/ MAE 4945
 MAE 4945*** Internship in Mathematics Education 9 Pre-req/Co-req all coursework and state exams completed and passed/ MAE 4942

*** Course requires full-time field experience

Computer Competency: Upon completion of the 16th earned college level credit (excluding EAP and college preparatory courses), a student must take the computer competency test and pass; or by the 31st earned college level credit (excluding EAP and college preparatory courses), a student must pass CGS 1060, an equivalent continuing education or vocational credit course or retest with a passing score on the computer competency test.

Courses taken to fulfill the general education requirements must be completed with a grade of “C” or better.

To be admitted to the Baccalaureate Degree in Education a student must have completed an A.A. degree or at least earned 60 semester credit hours from an accredited college or university with a minimum cumulative 2.5 Grade Point Average (GPA) on a 4.0 scale and present passing scores on all sections of the CLAST or the General Knowledge Test (GK) without exceptions or waivers.

Fingerprint Requirement: Most courses in the teacher education program require school site-based field experiences, culminating in a full-time 12-week internship. School districts require a criminal background check for students completing service hours, field placement, practicum, or internships. Fingerprinting and FBI background check procedures are at the applicant’s expense. Students with felony arrests may wish to consider these requirements carefully and, if necessary, seek advice from an advisor in the School of Education before applying to programs in the School of Education. Students without a valid Social Security number will not be eligible for placement in the school district. The Director of Clinical Supervision and Internship Placement will assist students through these requirements.

A minimum of 30 semester hours of 3000-4000 level courses must be taken. Courses must be completed with a grade of “C” or better.

Foreign Language: Students admitted to the baccalaureate degree in Education without meeting the foreign language admission requirement of at least 2 courses of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation. Foreign language courses taken at the college level may be used to meet the diversity requirement.

Diversity: Students must complete 9 credits of courses with an international/ diversity focus of which 6 credits are satisfied by EDG2701 and EEX2000. Accepted courses are noted with a number.

Executive Summary – Modifications to Existing Program

Program Title: BS Exceptional Student Education (K-12)
Program Code: S4300
Department: Education
Effective Term: Fall 2012-1
Degree Type: Bachelor of Science
Affected Campuses: 1, 2, 3, 5, 6, 7, 8

Rationale: Modify program to:

- meet science pre-service teacher needs in teaching reading to secondary students; and
- address the new Florida Educator Accomplished Practice standards required by the FLDOE for teacher preparation.

Modification:

5. ***Discipline Content:***

- Remove from **program only** the following courses:
 1. EEX 3103 Survey of Language Development & Common Disorders (1 credits)
 2. EEX 3760 Instructional & assistive Technology in Special Education (2 credits)
 3. EEX 4834 Practicum in Special Education (3 credits)
 4. TSL 3331 - ESOL: Language Principles and Acquisition (3 credits)
 5. TSL 3520 - ESOL II: Communication and Culture (3 credits)
 6. TSL 4347 - ESOL III: Methods of Teaching ESOL Students (3 credits)
- Add:
 1. EEX 3102 Language Development & Communication Disorders (3 credits)
 2. EEX 4XXX Instructional & Assistive Technology in Special Education (3 credits)
 3. EEX 4833 Practicum in Special Education (3 credits)
 4. TSL 3XXX ESOL I: Second Language Acquisition, Communication, & Culture (3 credits)
 5. TSL4311 ESOL II: Methods of Teaching ESOL Students (3 Credits)

APPROVE_____ **OPPOSE**_____ **MORE INFORMATION**_____



**B. MIAMI DADE COLLEGE
SCHOOL OF EDUCATION**

**Bachelor of Science Degree
Exceptional Student Education**
Total credits required for the degree is 120

Upon completion of the Bachelor of Science Degree in Exceptional Student Education program, the student will be eligible to obtain a Florida Educator Certification in Exceptional Student Education (K-12).

GENERAL EDUCATION REQUIREMENTS

| Course | Course Title | Credits | Pre-/Co-Requisites |
|-----------------------------------|---------------------|----------------|--|
| Communications – 6 credits | | | |
| ENC 1101 | English Comp 1 | 3 | |
| ENC 1102 | English Comp 2 | 3 | Pre-req ENC 1101 or equivalent with a grade of “C” or better |

Oral Communications – 3 credits

Select three (3) credits from the following oral communications courses:

| | | | |
|-----------------------|-------------------------------|---|--|
| LIT 2480 ¹ | Issues in Lit & Culture | 3 | |
| SPC 1026 | Fund of Speech Communication | 3 | |
| ENC 2106 | Advanced Communication Skills | 3 | |

¹ Note: Lit 2480 meets 3 of 9 required credits of international / diversity focus

Humanities – 6 credits

Students must take three (3) credits from Group A and three (3) credits from Group B:

Group A

| | | | |
|----------|------------------------------|---|------------------|
| ARH 1000 | Art Appreciation | 3 | |
| DAN 2100 | Dance Appreciation | 3 | |
| HUM 1020 | Humanities | 3 | |
| MUL 1010 | Music Appreciation | 3 | |
| PHI 2604 | Critical Thinking and Ethics | 3 | Pre-req ENC 1101 |

Group B

| | | | |
|----------|------------------------------|---|---|
| ARH 2740 | Cinema Appreciation | 3 | Pre-req HUM1020 |
| LIT 2120 | A Survey of World Literature | 3 | Pre-req ENC 1101, ENC 1102, or equivalent |
| MUL 2380 | Jazz & Pop Music in America | 3 | |
| PHI 2010 | Introduction to Philosophy | 3 | |
| THE 2000 | Theatre Appreciation | 3 | |

Behavioral/ Social Sciences – 6 credits

Students must take three (3) credits from Group A and three (3) credits from Group B:

If student selects a 1000 level course from one group, a 2000 level course must be selected from the other group.

Group A (3 credits)

| | | | |
|------------|---------------------------------------|---|------------------------------|
| ANT 2410 | Introduction to Cultural Anthropology | 3 | |
| DEP 2000 * | Human Growth and Development | 3 | * recommended by SOE faculty |
| ISS 1161 | The Individual in Society | 3 | |
| PPE 1005 | Psychology of Personal Effectiveness | 3 | |
| PSY 2012 | Introduction to Psychology | 3 | |
| SYG 2000 | Introduction to Sociology | 3 | |

Group B (3 credits)

| | | | |
|----------|---|---|--|
| AMH 2010 | History of the U.S. to 1877 | 3 | |
| AMH 2020 | History of the U.S. since 1877 | 3 | |
| ECO 2013 | Principles of Economics | 3 | |
| ISS 1120 | The Social Environment | 3 | |
| POS 2041 | American Federal Government | 3 | |
| WOH 2012 | History of World Civilizations to 1715 | 3 | |
| WOH 2022 | History of World Civilization from 1715 | 3 | |

Natural Science – 6 credits

Students must take three (3) credits from Life Sciences and three (3) credits from Physical Sciences, excluding labs.

| | | |
|-------------------|--|---|
| Life Sciences | BOT, BSC, OCB, PCB, ZOO | 3 |
| Physical Sciences | AST, CHM, ESC, GLY, MET, OCE, PHY, PSC | 3 |

Mathematics – 6 credits

Any 6 credits excluding labs:

| | | | | | | | |
|-----|-----|-----|-----|-----|----------|----------|----------|
| MAC | MAD | MAP | MAS | MGF | MTG 2204 | QMB 2100 | STA 2023 |
|-----|-----|-----|-----|-----|----------|----------|----------|

General Education Elective - 3 credits

| | | | | |
|---|--|---|---------|----------|
| EDF 1005* | Introduction to Education | 3 | | |
| Education Common Prerequisites – 9 credits | | | | |
| EDF 2085* ² | Diverse Populations | 3 | | |
| EEX 2000 * ² | Introduction to Special Education | 3 | Pre-req | EDF 1005 |
| EME 2040 | Introduction to Educational Technology | 3 | Pre-req | EDF 1005 |

²Note: EDF 2085 and EEX 2000 meet 6 of 9 required credits of international/diversity focus

* Course requires a minimum of 15 hours of service learning experience

Electives – 15 credits

Courses that are not used for General Education Requirements may be used for electives here (refer to list below).

Students are encouraged to check with their advisor or go to www.FACTS.org for transfer information.

ACG, AFH, AFR, AMH, AML, ANT, ARC, ARE, ARH, ART, ASC, ASH, AST, ATF (except 26301), AVM (except 1062, 1520, 1521), AVS, BCN, BOT, BRC1001,BSC, BUL, CCJ (except 1102), CDA 2528, CGS (except 1400, 1500, 1501, 1510, 1511, 1541, 1543, 1560, 1564, 1571,1580,1810,1871, 2140C, 2423, 2567), CHI, CHM, CIS 1000, CJD (except 1442, 1940), CJT (except 2994), CLP, COE1949, COP (except 1160, 1340, 2122, 2123, 2162, 2334, 2336, 2345, 2400, 2401, 2700, 2704), COT, CPO, CRW, CTE (except 2781L, 2782L, 2783L, 2862,2863,2864), DAA, DAN (except 1500,1501), DEH, DEP, DES, DIE, ECO, ECP, ECS, EDF, EDG, EEC, EEL, EET (except 1949,2949), EEX, EGS, EHD (except 1402,1941), EME, ENC 1210, 2302, ENG, ENL, EST, ETC, ETD, ETE, ETG, ETI, ETM, ETN (except 1350, 1351, 2352, 2455), EUH, FIL (except 2278, 2945), FIN 2000, FOT, FRE, FRW, FSS 1115,2431, GEA, GEB, GEO, GER, GEY (except 2000), GLY, GRA. (except 1949,2949), HAL, HBR, HFT (except 1949, 2949), HLP (except 1082), HOS, HSA, HSC (except 1200, 2531, 2532, 2554), HUM 2513, 2574, HUN, HUS, IDH, IND, INP, INR, ISC, ISS, ITA, JOU, PN, JST, LAH, LEI, LIN, LIS, LIT, MAC, MAD, MAN (except 1949, 2949), MAP, MAR, MAS, MCB, MET, MGF, MIS, MKA (except 1949, 2949), MMC, MRE (except 2920, 2930), MTG 2204, 2204L, MUC, MUE, MUG, MUH, MUL, MUM, MUN, MUO, MUS, MUT, MVB, MVJ, MVK, MVO, MVP, MVS, MW, MVW, NUR, OCB, OCE, OPT, ORH (except 2234,2277,2932,2949), ORI 2000, OST (except 1741, 1741L, 1742, 1742L, 1821, 1949, 2224, 2387, 2388, 2822, 2930, 2949), PAD, PCB, PCO, PEO, PEP, PEQ, PET (except 2303, 2303L, 2940), PGY, PHH, PHI, PHM, PHT (except 2120, 2120L, 2931), PHY, PLA, POR, POS, POT, PPE, PSB, PSC, PSY, PUR, QMB, RAT, REA1106, 1205, REE, REL, RET (except 1273, 1273L, 1830,1841,2930,2931,2932), RTE (except 2061), RUS, RTV, SLS 1401, SOP, SOW, SPA, SPC (except 2440, 2447I), SPN (except 1030,1031), SPT, SPW, STA, SUR, SYG, TAX, THE, TPA;TPP, TRA, VIC, WOH, ZOO

Professional Education Core - 15 credits

| | | | | |
|-----------|--|---|------------|---------------------------------------|
| EDG 3321 | General Teaching Skills | 3 | Pre-req | EDF 1005, EDF2085, EEX 2000, EME 2040 |
| EDF 4430 | Measurement & Assessment in Education | 3 | Pre-req | EDG 3321 |
| EDG 3443* | Classroom and Behavior Management | 3 | Co/Pre-req | EDG 3321 |
| EEX 3071* | Teaching Exceptional and Diverse Populations in Inclusive Settings | 3 | Co/Pre-req | EEX 2000, EDG3443 |
| RED 3013* | Foundations of Reading Instruction | 3 | Co/Pre-req | EDG 3321 |

*Course requires a minimum of 15 hours of clinical experience

Discipline Content – 33 credits

| | | | | |
|-----------|---|---|------------|------------------------------|
| EDG 4376* | Integrating Language Arts and Social Sciences | 3 | Co/Pre-req | EDG 3321, EDF 4430, RED 3393 |
|-----------|---|---|------------|------------------------------|

~~EEX3103 Survey of Language Development & Common Disorders Remove from program ONLY.~~ 4

| | | | | |
|----------|--|---|------------|-----------------|
| EEX 3102 | Language Development and Communication Disorders | 3 | Co/Pre-req | EDG3321,TSL3XXX |
|----------|--|---|------------|-----------------|

~~EEX3760 Instructional & Assistive Technology in Special Education Remove from program ONLY.~~ 2

| | | | | |
|----------|---|---|-------------|---------------------------|
| EEX 4XXX | Instructional and Assistive Technology in Special Education | 3 | Pre-/Co-req | EME 2040,EDG3321,EEX 3071 |
|----------|---|---|-------------|---------------------------|

| | | | | |
|-----------|---------------------------------|---|---------|------------------|
| EEX 4221* | Assessment in Special Education | 3 | Pre-req | EDG3321, EDF4430 |
|-----------|---------------------------------|---|---------|------------------|

~~EEX4834 Practicum in Special Education Remove from program ONLY.~~ 3

| | | | | |
|------------|--------------------------------|---|-------------|------------------------------|
| EEX 4833** | Practicum in Special Education | 3 | Pre-/Co-req | EDG 3443, EDG 4376, RED 4519 |
|------------|--------------------------------|---|-------------|------------------------------|

| | | | | |
|-----------|---------------------------------|---|---------|--------------------|
| MAE 4360* | Methods of Teaching Mathematics | 3 | Pre-req | EDF 4430, EDG 3321 |
|-----------|---------------------------------|---|---------|--------------------|

| | | | | |
|-----------|---|---|--|--|
| RED 3393* | Differentiated Instruction in Content Reading | 3 | | |
|-----------|---|---|--|--|

| | | | | |
|-----------|---|---|------------|------------------|
| RED 4519* | Diagnosis and Instructional Intervention in Reading | 3 | Co/Pre-req | RED 3013,EEX4833 |
|-----------|---|---|------------|------------------|

| | | | | |
|-----------|-----------------------------|---|---------|--------------------|
| SCE 4362* | Methods of Teaching Science | 3 | Pre-req | EDF 4430, EDG 3321 |
|-----------|-----------------------------|---|---------|--------------------|

~~TSL 3331 ESOL: Language Principles and Acquisition Remove from program ONLY.~~ 3

~~TSL3520 ESOL II: Communication and Culture Remove from program ONLY.~~ 3

~~TSL 4347 ESOL III: Methods of Teaching ESOL Students Remove from program ONLY.~~ 3

| | | | | |
|-----------|---|---|------------|----------|
| TSL 3XXX* | ESOL I: Second Language Acquisition, Communication, and Culture | 3 | Co/Pre-req | EDG 3321 |
|-----------|---|---|------------|----------|

| | | | | |
|-----------|--|---|---------|----------|
| TSL 4311* | ESOL II: Methods of Teaching ESOL Students | 3 | Pre-req | TSL 3XXX |
|-----------|--|---|---------|----------|

*Course requires a minimum of 15 hours of clinical experience

**Course requires a minimum of 60 hours of clinical experience

Student Teaching/Internship – 12 credits

| | | | | |
|-------------|---------------------------------|---|----------------|--|
| EEX 4940*** | Internship in Special Education | 9 | Pre-req/Co-req | All coursework and state exams completed and passed/EEX 4930 |
| EEX 4930*** | Seminar in Special Education | 3 | Pre-req/Co-req | All coursework and state exams completed and passed/EEX 4940 |

*** Course requires full-time clinical experience

Computer Competency: Upon completion of the 16th earned college level credit (excluding EAP and college preparatory courses), a student must take the computer competency test and pass; **or** by the 31st earned college level credit (excluding EAP and college preparatory courses), a student must pass CGS 1060, an equivalent continuing education or vocational credit course or retest with a passing score on the computer competency test.

Courses taken to fulfill the general education requirements must be completed with a grade of “C” or better.

To be admitted to the Baccalaureate Degree in Education a student must have completed an A.A. degree **or** at least earned 60 semester credit hours from an accredited college or university with a minimum cumulative 2.5 Grade Point Average (GPA) on a 4.0 scale and present passing scores on all sections of the CLAST **or** the General Knowledge Test (GKT) without exceptions or waivers.

Fingerprint Requirement: Most courses in the teacher education program require school site-based clinical experiences, culminating in a full-time 12-week internship. School districts require a criminal background check for students completing service hours, field placement, practicum, or internships. Fingerprinting and FBI background check procedures are at the applicant’s expense. Students with felony arrests may wish to consider these requirements carefully and, if necessary, seek advice from an advisor in the School of Education before applying to programs in the School of Education. Students without a valid Social Security number will not be eligible for placement in the school district. The Director of Clinical Supervision and Internship Placement will assist students through these requirements.

A minimum of 30 semester hours of 3000-4000 level courses must be taken. Courses must be completed with a grade of “C” or better.

Foreign Language: Students admitted to the baccalaureate degree in Education without meeting the foreign language admission requirement of at least 2 courses of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation. Foreign language courses taken at the college level may be used to meet the diversity requirement.

Executive Summary – Modifications to Existing Program

Program Title: Secondary Science Education - Physics
Program Code: S4103
Department: Education
Effective Term: Fall 2012-1
Degree Type: Bachelor of Science
Affected Campuses: 1, 2, 3, 5, 6, 7, 8

Rationale: Modify program to:

- meet science pre-service teacher needs in teaching reading to secondary students; and
- address the new Florida Educator Accomplished Practice standards required by the FLDOE for teacher preparation.

Modification:

1. **Professional Education Core:**
 - Delete: RED 3013 – Foundations of Reading Instruction (3 credits)
 - Add: RED 3393 – Differentiated Instruction in Content Reading (3 credits)
2. **BS Courses :**
 - Move: EME 3430 (2 credits) to Upper Division Science Education Discipline Content Area
3. **Courses:**
 - Move: CHM1045 to Program Prerequisites Area

APPROVE_____ **OPPOSE**_____ **MORE INFORMATION**_____



• **MIAMI DADE COLLEGE**
SCHOOL OF EDUCATION

Bachelor of Science Degree
Secondary Science Education – Physics
Total credits required for the degree is 120

Upon completion of the Bachelor of Science Degree in Secondary Science Education in Physics program, the student will be eligible to obtain a Florida Educator Certification in Physics (grade 6-12).

GENERAL EDUCATION REQUIREMENTS

| Course | Course Title | Credits | Pre-/Co-Requisites |
|-----------------------------------|----------------|---------|--|
| Communications – 6 credits | | | |
| ENC 1101 | English Comp 1 | 3 | |
| ENC 1102 | English Comp 2 | 3 | Pre-req ENC 1101 or equivalent with a grade of “C” or better |

Oral Communications – 3 credits

Select three (3) credits from the following oral communications courses:

| | | | |
|-----------------------|-------------------------------|---|--|
| LIT 2480 ¹ | Issues in Lit & Culture | 3 | |
| SPC 1026 | Fund of Speech Communication | 3 | |
| ENC 2106 | Advanced Communication Skills | 3 | |

¹ Note: Lit 2480 meets 3 of 9 required credits of international / diversity focus

Humanities – 6 credits

Students must take three (3) credits from Group A and three (3) credits from Group B:

Group A

| | | | |
|----------|------------------------------|---|------------------|
| ARH 1000 | Art Appreciation | 3 | |
| DAN 2100 | Dance Appreciation | 3 | |
| HUM 1020 | Humanities | 3 | |
| MUL 1010 | Music Appreciation | 3 | |
| PHI 2604 | Critical Thinking and Ethics | 3 | Pre-req ENC 1101 |

Group B

| | | | |
|----------|------------------------------|---|---|
| ARH 2740 | Cinema Appreciation | 3 | Pre-req HUM1020 |
| LIT 2120 | A Survey of World Literature | 3 | Pre-req ENC 1101, ENC 1102, or equivalent |
| MUL 2380 | Jazz & Pop Music in America | 3 | |
| PHI 2010 | Introduction to Philosophy | 3 | |
| THE 2000 | Theatre Appreciation | 3 | |

Behavioral/ Social Sciences – 6 credits

Students must take three (3) credits from Group A and three (3) credits from Group B:

If student selects a 1000 level course from one group, a 2000 level course must be selected from the other group.

Group A (3 credits)

| | | | |
|------------|---------------------------------------|---|------------------------------|
| ANT 2410 | Introduction to Cultural Anthropology | 3 | |
| DEP 2000 * | Human Growth and Development | 3 | * recommended by SOE faculty |
| ISS 1161 | The Individual in Society | 3 | |
| CLP 1006 | Psychology of Personal Effectiveness | 3 | |
| PSY 2012 | Introduction to Psychology | 3 | |
| SYG 2000 | Introduction to Sociology | 3 | |

Group B (3 credits)

| | | | |
|----------|---|---|--|
| AMH 2010 | History of the U.S. to 1877 | 3 | |
| AMH 2020 | History of the U.S. since 1877 | 3 | |
| ECO 2013 | Principles of Economics | 3 | |
| ISS 1120 | The Social Environment | 3 | |
| POS 2041 | American Federal Government | 3 | |
| WOH 2012 | History of World Civilizations to 1715 | 3 | |
| WOH 2022 | History of World Civilization from 1715 | 3 | |

Natural Science – 6 credits

| | | | |
|----------|----------------------------------|---|--|
| BSC 1005 | General Education Biology | 3 | |
| PSC 1515 | Energy in the Nature Environment | 3 | |

Mathematics – 6 credits

| | | | |
|----------|------------------------------------|---|--|
| MAC 2311 | Calculus and Analytical Geometry 1 | 5 | Pre-req MAC 1114 and MAC 1140 or MAC 1147 with a grade of “C” or better or departmental permission |
| MAC 2312 | Calculus and Analytical Geometry 2 | 4 | Pre-req MAC 2311 with a grade of “C” or better |

It is expected that students pursuing a BS-Physics Education degree will possess appropriate math skills for placement in MAC 2311.

* 3 credit hours of Mathematics (overage from Gen Ed Math requirements) will be counted as program pre-requisite credits

General Education Elective - 3 credits

EDF 1005* Introduction to Education 3

Education Common Prerequisites – 9 credits

EDG 2701*² Diverse Populations 3
 EEX 2000*² Introduction to Special Education 3
 EME 2040 Introduction to Educational Technology 3 Pre-req CGS 1060 or computer competency

²Note: EDG 2701 and EEX 2000 meet 6 of 9 required credits of international/diversity focus

* Course requires a minimum of 15 hours of field experience

Program Prerequisites – 15 16 credits

| | | | |
|-----------|------------------------------------|---------------|--|
| CHM 1045 | General Chemistry | 3 | (Moved from Discipline Content) |
| MAC 2311* | Calculus and Analytical Geometry I | GE (3) | Pre-req MAC 1114 and MAC 1140 or MAC 1147 with a grade of "C" or better or departmental permission |
| PHY 2048 | Physics with Calculus I | 4 | Pre-/Co-req High school physics or PHY 1025, PHY 2053, or departmental approval and MAC 2311/PHY 2048L |
| PHY 2048L | Physics with Calculus I Lab | 1 | Pre-/Co-req High school physics or PHY 1025, or PHY 2053, or departmental approval and MAC 2311/PHY 2048 |
| PHY 2049 | Physics with Calculus II | 4 | Pre/Co-req PHY 2048/MAC 2312, PHY 2049L |
| PHY 2049L | Physics with Calculus II Lab | 1 | Pre/Co-req PHY 2048L/MAC 2312, PHY 2049 |

* 3 credit hours of Mathematics (average from Gen Ed Math requirements) will be counted as program pre-requisite credits

Professional Education Core - 18 credits

EDG 3321* General Teaching Skills 3 Pre-req EDF 1005, EDG 2701, EEX 2000, EME 2040
 EDF 4430 Measurement & Assessment in Education 3 Pre-/Co-req EDG 3321
 EDG 3411 Classroom Management for Comm. K-12 3 Pre-req EDG 3321
 EEX 3071* Teaching Exceptional and Diverse Populations in Inclusive Settings 3 Pre-req EEX 2000

RED 3013* Foundations of Reading Instruction 3 Pre-req EDG 3321 (Remove From Program Only)

RED 3393* Foundations of Reading Instruction 3 Pre-req departmental approval

TSL 4324C* ESOL Strategies for Content Area Teachers 3 Pre-req EDG 3321

*Course requires a minimum of 15 hours of field experience

Discipline Content – 30 credits

| | | | |
|------------|--|---|--|
| AST 1002 | Astronomy | 3 | |
| EME 3430 | Instructional Technology in Math and Science | 2 | Pre-req departmental approval (Moved from Program Prerequisites) |
| MAP 2302 | Introduction to Differential Equations | 3 | Pre-req MAC 2312 with a "C" or better or equivalent |
| PHY 2504 | Thermodynamics and Waves | 2 | Pre-req MAP 2302 and PHY 2049 |
| PHY 3101 | Modern Physics | 3 | Pre-req MAP 2302 and PHY 2049, PHY 2048 |
| PHY 3802L | Intermediate Physics Lab | 1 | Pre-req MAP 2302 and PHY 2049, PHY 2048 |
| PHY 4220 | Classical Mechanics | 3 | Pre-req MAP 2302 and PHY 2049, PHY 2048 |
| PHY 4424 | Optics | 3 | Pre-req MAP 2302 and PHY 2049, PHY 2048 |
| SCE 3893 | Teaching and Learning the Nature of Science | 3 | Pre-req departmental approval |
| SCE 4362* | Methods of Teaching Science | 3 | Pre-req departmental approval |
| SCE 4363** | Advanced Topics in Science Education Practicum | 3 | Pre-req SCE 4262 |

*Course requires a minimum of 15 hours of field experience

**Course requires a minimum of 40 hours of field experience

Student Teaching/Internship – 12 credits

SCE 4945*** Student Teaching/Student Internship-Science 9 Co-req SCE4943 and departmental approval
 SCE 4943*** Seminar in Science Education 3 Co-req SCE4945 and departmental approval

*** Course requires full-time field experience

Computer Competency: Upon completion of the 16th earned college level credit (excluding EAP and college preparatory courses), a student must take the computer competency test and pass; **or** by the 31st earned college level credit (excluding EAP and college preparatory courses), a student must pass CGS 1060, an equivalent continuing education or vocational credit course or retest with a passing score on the computer competency test.

Courses taken to fulfill the general education requirements must be completed with a grade of "C" or better.

To be admitted to the Baccalaureate Degree in Education a student must have completed an A.A. degree **or** at least earned 60 semester credit hours from an accredited college or university with a minimum cumulative 2.5 Grade Point Average (GPA) on a 4.0 scale and present passing scores on all sections of the CLAST **or** the General Knowledge Test (GK) without exceptions or waivers.

Fingerprint Requirement: Most courses in the teacher education program require school site-based field experiences, culminating in a full-time 12-week internship. School districts require a criminal background check for students completing service hours, field placement, practicum, or internships. Fingerprinting and FBI background check procedures are at the applicant's expense. Students with felony arrests may wish to consider these requirements carefully and, if necessary, seek advice from an advisor in the School of Education before applying to programs in the School of Education. Students without a valid Social Security number will not be eligible for placement in the school district. The Director of Clinical Supervision and Internship Placement will assist students through these requirements.

A minimum of 30 semester hours of 3000-4000 level courses must be taken. Courses must be completed with a grade of "C" or better.

Foreign Language: Students admitted to the baccalaureate degree in Education without meeting the foreign language admission requirement of at least 2 courses of sequential foreign language at the secondary level or the equivalent of such instruction at the postsecondary level must earn such credits prior to graduation. Foreign language courses taken at the college level may be used to meet the diversity requirement.

Executive Summary – Modifications to Existing Program

Program Title: B.S. with a major in Biological Sciences: Science Education Option
Program Code: S5202/S9202
Department: Education
Effective Term: Fall 2012-1
Degree Type: Bachelor of Science
Affected Campuses: 1, 2, 3, 5, 6, 7, 8

Rationale: Modify program to:

- Meet science pre-service teacher needs in teaching reading to secondary students; and
- Address the new Florida Educator Accomplished Practice standards required by the FLDOE for teacher preparation.

Modification:

1. ***BIOLOGICAL SCIENCES SPECIALTY AREA – SCIENCE EDUCATION:***
 - Remove from Program Only: RED 3013 – Foundations of Reading Instruction (3 credits)
 - Add: RED 3393 – Differentiated Instruction in Content Reading (3 credits)

APPROVE _____ **OPPOSE** _____ **MORE INFORMATION** _____

Total credits required for the degree is 120.

The Bachelor in Science (B.S.) in Biological Sciences is designed to provide students with a broad foundation in biology. Miami Dade College students will explore structure, function, genetics, and evolution of cells and organisms, while being provided the hands-on skills necessary to obtain jobs in the Biological/Life Science fields. Students take the core courses in biology, chemistry, physics and mathematics, and must meet the same General Education Requirements of all students seeking an AA degree. Students may choose from a variety of electives in science and general education to complete their degree requirements.

| Course | Course Title | Credits | Pre-/Co-Requisites |
|---|--|----------------|---------------------------------|
| GENERAL EDUCATION REQUIREMENTS – 36 Credits Required | | | |
| Communications – 6 Credits Required | | | |
| ENC 1101 | English Composition 1 | 3 | |
| ENC 1102 | English Composition 2 | 3 | Pre-Req ENC 1101 |
| Oral Communication – 3 Credits Required | | | |
| Select 3 Credits from the following | | | |
| ENC 2300 | Advanced Composition & Communication | 3 | Pre-Req ENC 1101, 1102 |
| LIT 2480 | Issues in Literature & Culture | 3 | Pre-Req ENC 1102 |
| SPC 1017 | Fundamentals of Speech Communications | 3 | |
| Humanities – 6 Credits Required | | | |
| Group A – Select 3 Credits from the following: | | | |
| ARH 1000 | Art Appreciation | 3 | |
| DAN 2100 | Dance Appreciation | 3 | |
| HUM 1020 | Humanities | 3 | |
| MUL 1010 | Music Appreciation | 3 | |
| PHI 2010 | Introduction to Philosophy | 3 | |
| *AND* | | | |
| Group B – Select 3 Credits from the following: | | | |
| ARH 2740 | Cinema Appreciation | 3 | |
| MUL 2380 | Jazz & Popular Music in America | 3 | |
| PHI 2604 | Critical Thinking/Ethics | 3 | Pre-Req ENC 1102 |
| THE 2000 | Theatre Appreciation | 3 | |
| Behavioral and Social Science – 6 Credits Required | | | |
| Group A – Select 3 Credits from the following: | | | |
| ANT 2410 | Introduction to Cultural Anthropology | 3 | |
| CLP 1006 | Psychology of Personal Effectiveness | 3 | |
| DEP 2000 | Human Growth & Development | 3 | |
| ISS 1161 | Individual in Society | 3 | |
| PSY 2012 | Introduction to Psychology | 3 | |
| SYG 2000 | Introduction to Sociology | 3 | |
| *AND* | | | |
| Group B – Select 3 Credits from the following: | | | |
| AMH 2010 | History of the United States to 1877 | 3 | |
| AMH 2020 | History of the United States since 1877 | 3 | |
| ECO 2013 | Principles of Economics (Macro) | 3 | |
| ISS 1120 | The Social Environment | 3 | |
| POS 2041 | American Federal Government | 3 | |
| WOH 2012 | History of World Civilizations to 1715 | 3 | |
| WOH 2022 | History of World Civilizations from 1715 | 3 | |
| Natural Science – 6 Credits Required | | | |
| Group A – Select 3 Credits from the following | | | |
| BOT 1010 | Botany | 3 | Pre/Co-Req BOT 1010L |
| BSC 1005 | General Education Biology | 3 | BSC 1005L (Optional Laboratory) |
| BSC 1030 | Social Issues in Biology | 3 | |
| BSC 1050 | Biology & Environment | 3 | |
| BSC 1084 | Functional Human Anatomy | 3 | BSC 1084 (Optional Laboratory) |
| BSC 2010 | Principles of Biology 1 (CP) | 3 | Pre/Co-Req BSC 2010L, CHM 1045 |

(over)

| Course | Course Title | Credits | Pre-/Co-Requisites |
|---|---|---------|--|
| Natural Science – Continued | | | |
| BSC 2020 | Human Biology: Fundamental of Anatomy & Physiology | 3 | BSC 2020L (Optional Laboratory) |
| BSC 2085 | Human Anatomy & Physiology 1 | 3 | Pre/Co-Req BSC 2085L |
| BSC 2250 | Natural History of South Florida | 3 | |
| HUN 1201 | Essentials of Nutrition | 3 | HUN 1201L (Optional Laboratory) |
| OCB 1010 | Introduction to Marine Biology | 3 | OCB 1010L (Optional Laboratory) |
| PCB 2033 | Introduction to Ecology | 3 | |
| PCB 2340C | Field Biology | 3 | |
| ZOO 1010 | Zoology | 3 | Co-Req ZOO 1010L |
| *AND* | | | |
| Group B – Select 3 Credits from the following | | | |
| AST 1002 | Descriptive Astronomy | 3 | |
| CHM 1045* | General Chemistry/ Qualitative Analysis 1 (CP) | 3 | Co-Req CHM 1045L |
| GLY* | | | |
| MET* | | | |
| OCE* | | | |
| PHY* | | | |
| PSC 1121 | General Education Physical Science | 3 | Pre-Req MAT 1033 |
| PSC 1515 | Energy in the Natural Environment | 3 | |
| * Any course with the following prefix excluding labs. | | | |
| Mathematics – 6 Credits Required | | | |
| Select 6 Credits from the following | | | |
| MAC 1105* | College Algebra (RECOMMENDED) | 3 | Pre-Req MAT 1033 or Appropriate Testing |
| MAD* | | | |
| MAP* | | | |
| MAS* | | | |
| MGF* | | | |
| MTG 2204 | Geometry for Educators | 3 | |
| QMB 2100 | Basic Business Statistics | 3 | Co-Req QMB 2100L |
| STA 2023 | Statistical Methods (CP) | 3 | Pre-Req MAT 1033 or Appropriate Testing |
| * Any course with the following prefix excluding labs. | | | |
| General Education Elective – 3 Credits Required | | | |
| BSC 2011 | Principles of Biology 2 (CP) | 3 | Pre-Req BSC 2010,2010L; Co-Req BSC 2011L |
| <u>LOWER DIVISION COMMON PREREQUISITE REQUIREMENTS – 24 Credits Required</u> | | | |
| BSC 2010L | Principles of Biology 1 Lab | 2 | Pre/Co-Req CHM 1045/L; Co-Req BSC 2010 |
| BSC 2011L | Principles of Biology 2 Lab | 2 | Pre-Req BSC 2010/L; Co-Req BSC 2011 |
| CHM 1045L | General Chemistry/ Qualitative Analysis 1 Lab | 2 | Co-Req CHM 1045 |
| CHM 1046 | General Chemistry/ Qualitative Analysis 2 | 3 | Pre-Req CHM 1045/L; Co-Req CHM 1046L |
| CHM 1046L | General Chemistry/ Qualitative Analysis 2 Lab | 2 | Pre-Req CHM 1045/L; Co-Req CHM 1046 |
| CHM 2210 | Organic Chemistry 1 | 3 | Pre-Req CHM 1046/L; Co-Req CHM 2210L |
| CHM 2210L | Organic Chemistry 1 Lab | 2 | Pre-Req CHM 1046/L; Co-Req CHM 2210 |
| CHM 2211 | Organic Chemistry 2 | 3 | Pre-Req CHM 1046/L; Co-Req CHM 2210L |
| CHM 2211L | Organic Chemistry 2 Lab | 2 | Pre-Req CHM 1046/L; Co-Req CHM 2210 |
| MAC 2241 | Life Science Calculus | 3 | Pre-Req MAC 1105 |

(over)

ALL SUBSEQUENT LOWER DIVISION COURSEWORK CAN BE TAKEN WITH UPPER DIVISION COURSEWORK

| Course | Course Title | Credits | Pre-/Co-Requisites |
|--|----------------------------------|----------------|---|
| <u>LOWER DIVISION REQUIREMENTS – 8 Credits Required</u> | | | |
| PHY 2053 | Physic 1 (without Calculus) | 3 | Pre-Req MAC 2241; Co-Req PHY 2053L |
| PHY 2053L | Physic 1 (without Calculus) Lab | 1 | Pre-Req MAC 2241; Co-Req PHY 2053 |
| PHY 2054 | Physic 2 (without Calculus) | 3 | Pre-Req PHY 2053; Co-Req PHY 2054L |
| PHY 2054L | Physic 2 (without Calculus) Lab | 1 | Pre-Req PHY 2053L; Co-Req PHY 2054 |
| <u>UPPER DIVISION BIOLOGICAL SCIENCES CORE CURRICULUM – 25 Credits Required</u> | | | |
| BCH 3023 | Biochemistry | 3 | Pre-Req BSC 2011/L, CHM 2211/L; Co-Req BCH 3023L |
| BCH 3023L | Biochemistry Lab | 2 | Pre-Req BSC 2011/L, CHM 2211/L; Co-Req BCH 3023 |
| BSC 3930 | Biological Sciences Seminar | 1 | Pre-Req BSC 2011/L, CHM 2211/L |
| MCB 3023 | Principles of Microbiology | 3 | Pre-Req BSC 2011/L, CHM 2211/L; Co-Req MCB 3023L |
| MCB 3023L | Microbiology Lab | 2 | Pre-Req BSC 2011/L, CHM 2211/L; Co-Req MCB 3023 |
| PCB 3060 | Genetics | 3 | Pre-Req BSC 2011/L |
| PCB 3060L | Genetics Lab | 2 | Pre-Req BSC 2011/L; Co-Req PCB 3060 |
| PCB 4023 | Molecular and Cell Biology | 3 | Pre-Req BSC 2011/L |
| PCB 4674 | Evolution | 3 | Pre-Req BSC 2011/L, PCB 3060, 3060L |
| BSC 4910 | Senior Capstone Research Project | 3 | Pre-Req Completion of BS-BS Core Curriculum & Approval by BS-BS Faculty |

BIOLOGICAL SCIENCES SPECIALTY AREA

Students must complete **ONE** of the following Specialty Areas:

AREA 1: BIOTECHNOLOGY (S5200/S9200) – 19 Credits Required

| | | | |
|-----------|---------------------|---|---|
| BSC 2426 | Biotechnology 1 | 3 | Co-Req BSC 2426L |
| BSC 2426L | Biotechnology 1 Lab | 2 | Co-Req BSC 2426 |
| BSC 2427 | Biotechnology 2 | 3 | Pre-Req BSC 2426; Co-Req BSC 2427L |
| BSC 2427L | Biotechnology 2 Lab | 2 | Pre-Req BSC 2426L; Co-Req BSC 2427 |
| BSC 4422 | Biotechnology | 3 | Pre-Req BCH 3023, BSC 2427, PCB 3060; Co-Req BSC 4422L |
| BSC 4422L | Biotechnology Lab | 2 | Pre-Req BCH 3023L, BSC 2427L, PCB 3060L; Co-Req BSC 4422L |
| PCB 4233C | Immunology | 4 | Pre-Req MCB 3023, 3023L |

AREA 2: BIOPHARMACEUTICAL (S5201/S9201) – 19 Credits Required

| | | | |
|-------------------------|-------------------------------|----------|---|
| BOT 3015 | Plant Diversity | 3 | Pre-Req BSC 2011/L, CHM 1046/L |
| ZOO 3021 | Animal Diversity | 3 | Pre-Req BSC 2011/L, CHM 1046/L |
| BOT 3015L | Plant Diversity Lab | 1 | Pre-Req BSC 2011/L, CHM 1046/L; Co-Req BOT 3015 |
| OR | | | |
| ZOO 3021L | Animal Diversity Lab | 1 | Pre-Req BSC 2011/L, CHM 1046/L; Co-Req ZOO 3021 |
| BSC 4434 | Bioinformatics for Biologists | 4 | Pre-Req BSC 2010/L, 2011/L, 3060/L |
| OR | | | |
| MCB 4503 | Virology | 3 | Pre-Req BSC 3023/L |
| PCB 4233C | Immunology | 4 | Pre-Req MCB 3023, 3023L |
| PCB 4097 | Human Physiology | 3 | Pre-Req BCH 3023, 3023L, PCB 4024, PHY 2054/L |
| General Elective | | 1 | See General Electives Below |

AREA 3: SCIENCE EDUCATION (S5202/S9202) – 18 Credits Required

| | | | |
|---|--|--------------|---|
| EDG 2311 | Substitute Teacher Training | 1 | |
| EDG 3321 | General Teaching Skills | 3 | Departmental Permission Required |
| EDG 3443 | Classroom Management | 3 | Pre-Req EDG 3321 |
| EDF 4430 | Assessment in Education | 3 | |
| EME 3430 | Instructional Technology in Math/Science | 2 | |
| RED 3013 | Foundations of Reading Instructions | 3 | |
| RED 3393 | Differentiated Instruction in Content Reading | 3 | Departmental Permission Required |
| Upper Division Biological Science Elective | | 3 | See General Electives Below |

(over)

| Course | Course Title | Credits | Pre-/Co-Requisites |
|---|----------------------------------|----------|--|
| GENERAL ELECTIVES – 8-9 Credits Required | | | |
| Students may use this elective block to complete the foreign language requirement. Those who have already completed this requirement may elect to take additional upper division science courses, the following courses or speak with an advisor to see additional approved course selection: | | | |
| BOT 3015 | Plant Diversity | 3 | Pre-Req BSC 2011/L, CHM 1046/L |
| BOT 3015L | Plant Diversity Lab | 1 | Pre-Req BSC 2011/L, CHM 1046/L; Co-Req BOT 3015 |
| BSC 4422 | Biotechnology | 3 | Pre-Req BCH 3023, BSC 2427, PCB 3060; Co-Req BSC 4422L |
| BSC 4422L | Biotechnology Lab | 2 | Pre-Req BCH 3023L, BSC 2427L, PCB 3060L; Co-Req BSC 4422L |
| BSC 4434 | Bioinformatics for Biologists | 4 | Pre-Req BSC 2010/L, 2011/L, 3060/L |
| BSC 4910 | Senior Capstone Research Project | 3 | Pre-Req Completion of BS-BS Core Curriculum & Approval by BS-BS Faculty |
| MCB 4503 | Virology | 3 | Pre-Req BSC 3023/L |
| PCB 3043 | Fundamentals of Ecology | 3 | Pre-Req BSC 2011/L, CHM 1046/L |
| PCB 4097 | Human Physiology | 3 | Pre-Req BCH 3023, 3023L, PCB 4024, PHY 2054/L |
| PCB 4233C | Immunology | 4 | Pre-Req MCB 3023, 3023L |
| PHI 3633 | Bioethics | 3 | |
| ZOO 3021 | Animal Diversity | 3 | Pre-Req BSC 2011/L, CHM 1046/L |
| ZOO 3021L | Animal Diversity Lab | 1 | Pre-Req BSC 2011/L, CHM 1046/L; Co-Req ZOO 3021 |
| Foreign Language Requirement | | 8 | See Advisor for Appropriate Selection or Testing |

Computer Competency: By the **16th earned** college level credit (excluding EAP and college preparatory courses), a student **must take** the Computer Competency Test and pass

Or

By the **31st earned** college level credit (excluding EAP and college preparatory courses), a student **must pass** CGS 1060, an equivalent continuing education or vocational credit course or retest with a **passing score on the Computer Competency Test.**

Foreign Language Requirement: Students admitted to the baccalaureate degree program without meeting the foreign language admission requirement of 2 credits of sequential foreign language at the secondary level or the equivalent of such instruction (8-10 credit hours) at the postsecondary level must earn such credits prior to graduation.

Additional Information:

Students entering with an AS or AAS degree may have more than 24 elective credits and may need additional General Education credits to meet the 36 General Education credits required for the baccalaureate degree. Students entering with an AA degree may need additional electives to provide appropriate background for the baccalaureate program.

A minimum cumulative grade point average of 2.0 is required for graduation.

Students must successfully complete 30 semester hours of 3000-4000 level course work.

Students should check their individualized Degree Audit Report to determine the specific graduation policies in effect for their program of study for the year and term they entered Miami Dade. This outline includes current graduation requirements.

The final responsibility for meeting graduation requirements rests with the student.

4. Testing

Placement Criteria Document (2012-2013)

https://www.mdc.edu/ir/CPT_CLAST/Placement_Document_2012-2013_Draft.pdf

APPROVE_____ OPPOSE_____ MORE INFORMATION_____

Informational Items –

Testing Fees 2012-2013

ACCUPLACER (CPT) and PERT: Eliminate the July 1 start date for assessing a retesting fee to High school graduates. Effective with June 7, 2012 graduates: use the 1st day after the M-DCPS Last Day of School to begin charging a re-test fee to high school graduates.