# ACADEMIC PROGRAM CURRICULUM STRUCTURE FORM

**Degree:** Bachelor of Education in Secondary Education

With Concentrations in **Mathematics**

**2018**

## 1. Overall Curriculum Structure

**Table 1.1**  *Overall Curriculum Structure*

| Curriculum Component | Total Number of | |
|---|---|---|
| | **Courses** | **Credit Hours** |
| Core Curriculum Requirements | 11 | 33 |
| Major Requirements | 10 | 36 |
| Concentration Requirements | 15 | 45 |
| Free Electives (if applicable) | 2 | 6 |
| Other Packages: _____ | | |
| Total: | | 120 |

## 2. Detailed Curriculum Structure

### 2.1. Core Curriculum Requirements, ( 33 CH)

For each package, students must take specific number of credit hours from the list of courses listed for that package as detailed in the following table.

**Table 2.1**     *Core Curriculum Requirements*

| | Package Title | Course Id. | Course Title | Nb. of Credit Hours per Course | Nb. of Contact Hours | | Pre-Requisites | Nb. of Credit Hours per package |
|---|---|---|---|---|---|---|---|---|
| | | | | | Theo. | Lab. | | |
| **Common Package 15 Credit hours** | Arabic Language | | **Language I sub-package (12 CH)** | | | | | |
| | | ARAB 100 | Arabic Language I | 3 | | | | 6 |
| | | ARAB 200 | Arabic Language II | 3 | | | | |
| | English Language | ENGL 202 | ENGLISH Language I Post Foundation | 3 | | | | 6 |
| | | ENGL 203 | ENGLISH Language II Post Foundation | 3 | | | | |
| | Islamic Culture | DAWA 111 | Islamic Culture | 3 | | | | 3 |
| **3 credits** | Humanities – Fine Art | | Students must complete 3 Credit Hours from courses listed in the Qatar and Gulf History Sub-package which is part of the Humanities/Fine Arts package. | 3 | | | | 3 |
| **3 credits** | Social – Behavioral Science | | Courses in CCP defined Social/Behavioral Sciences package. | 3 | | | | 3 |
| **3 credits** | Natural Sciences – Mathematics | | Students selecting the Concentration area in *Mathematics* must complete one course from the list of courses defined in the CCP Natural Science/Mathematics package. | 3 | | | | 3 |
| **3 credits** | General Knowledge | | Students selecting the *Mathematics* concentration area must complete this package requirements by completing 3 CH in courses listed in the CCP defined General Knowledge package. | 3 | | | | 3 |
| **3 credits** | General Skills | | Students selecting a concentration area in *Mathematics* must complete this package requirements by completing 3 CH in courses listed in the CCP defined General Skills package. | 3 | | | | 3 |
| **Supplemental College/Program 3 credits** | UNIV 100 Supplemental College | | First Year Seminar | 3 | | | 0 | 3 |

| | | | | | | | | 33 |
|---|---|---|---|---|---|---|---|---|
| **Total** | | | | | | | | |

## 2.2. Major Requirements (36 CH)

Students must complete 30 CH from the courses listed below in addition to completing

**6** CH from courses listed in the Methods sub-package related to the concentration area     selected by the student.

### 2.2.1. Major Core Requirements Package ( 36 CH)

| Course No. | Course Name | No. of hours | | | Pre - requisite(s): No/Name | Offered Semester |
|---|---|---|---|---|---|---|
| | | CH | Theory | Exp. | | |
| EDUC 310 | Foundation of Education in Qatar and School Reform | 3 | 3 | **0** | | F |
| EDUC 312 | Curriculum & Assessment | 3 | 3 | **0** | | S |
| EDUC 316 | Classroom Management | 3 | 3 | **0** | EDUC 312 | S |
| EDUC 317 | Inclusive Classrooms | 3 | 3 | **0** | | S |
| EDUC 320× | Human Development | 3 | 3 | **0** | | **S/F** خريف/ ربيع |
| EDSE 331 | Reading and Writing Across the Curriculum | 3 | 3 | **0** | EDUC 312 | S |
| EDUC 319 | Classroom Assessment | 3 | 3 | **0** | EDUC 310, 312 &320,  Students must have completed a minimum of 60 CH | F |
| EDSE 491 | Student Teaching in Secondary Education | 9 | 9 | **All Coursework** | **EDSE 344 and EDSE 464** | S |
| | **Methods for Math sub-package** | | | | | |
| EDSE 344 | Methods I:Instructional Strategies for Math | 3 | 3 | **Field work** | EDSE 331 | S |
| EDSE 464 | Methods II: Inquiry and ICT for Math | 3 | 3 | **Micro teaching** | EDSE 344 | F |

**× Students in the Primary Education Program ONLY must register EDUC 315 × Students in the Secondary Education Program ONLY must register EDUC 320**

## 2.3. Concentration Requirements for Mathematics Students (45 CH)

Students must complete a minimum of **45** credit hours by completing the following courses in concentration requirements:

**Table 2.3.1      Mathematics Subject Courses (45 CH)**

**Table 2.3.1**      *Courses in Concentration Requirements*

| Course Id. | Course Title | Nb. of Credit Hours | Nb. of Contact Hours | | Course Prerequisites | Course Co-Requisites | Offering Semester(s) |
|---|---|---|---|---|---|---|---|
| | | | Theo. | Lab. | | | |
| STAT 101 | Statistics I | 3 | 4 | 0 | - | | F&S |
| MATH 101 | Calculus I | 3 | 4 | 0 | MATH 004 OR MATH P100 OR SAT 550 OR ACT 24 OR (APEA 082) AND (APCL 095) | | F&S |
| MATH 102 | Calculus II | 3 | 4 | 0 | MATH 101 | | F&S |
| PHYS 101 | General Physics I | 3 | 3 | 1 | MATH 101 | | F&S |
| MATH 365 | Scientific Computation & Programming | 3 | 3 | 1 | MATH 231 | | S |
| MATH 211 | Calculus III | 3 | 4 | 0 | MATH 102 | | F&S |
| MATH 213 | Differential Equations | 3 | 4 | 0 | MATH 102 | Math 211 | Spring 2018,Spring 2019, Spring 2020 |
| MATH 220 | Foundations of Mathematics | 3 | 4 | 0 | MATH 101 OR MATH 103 | | F |
| MATH 222 | Real Analysis I | 3 | 4 | 0 | MATH 220 | | S |
| MATH 231 | Linear Algebra | 3 | 2 | 2 | MATH 101 | | F&S |
| MATH 233 | Abstract Algebra | 3 | 4 | 0 | MATH 220 | | Spring 2018, Fall 2018, Fall 2019 |
| MATH 324 | Complex Analysis | 3 | 4 | 0 | MATH 211 | | S |

| MATH 335 | Number Theory | 3 | 3 | 0 | MATH 220 | | F |
|---|---|---|---|---|---|---|---|
| MATH 341 | Modern Geometry | 3 | 4 | 0 | MATH 231 | | F |
| MATH 366 | Numerical Analysis I | 3 | 2 | **2** | MATH 102 & (CMPS221 ORCMPS251 OR CMPS223 OR MATH 365) | | F |

## 2.4 Major Electives ( 6 CH)

Students must take **6** credit hours from the list of courses listed in the following table.

**Table 2.4**        *Courses in Free Electives*

| Course Id. | Course Title | Nb. of Credit Hours | Nb. of Contact Hours | | Course Prerequisites | Course Co-Requisites | Offering Semester(s) |
|---|---|---|---|---|---|---|---|
| | | | Theo. | Lab. | | | |
| EDUC 100 | Photography | 3 | 3 | | | | - |
| EDUC 200 | Education and Societal Problems | 3 | 3 | | | | F&S |
| EDUC 201 | Research Methodology | 3 | 3 | | | | F&S |
| EDUC 203 | Family Relationships | 3 | 3 | | | | F&S |
| EPSY 201 | Introduction to Psychology | 3 | 3 | | | | F&S |
| EPSY 205 | Social Psychology | 3 | 3 | | | | F&S |

**UNDERGRADUATE CATALOG**
**Approved 2012-2013 Degree Requirements**
**Suggested Study Plan**
**Bachelor of Education in Secondary Education**
**Mathematics Concentration**

| FIRST YEAR [33] credit hours) | | | | SECOND YEAR [33] credit hours) | | | |
|---|---|---|---|---|---|---|---|
| **Fall Semester** | | | | **Fall Semester** | | | |
| Course # | Course Title | Cr Hrs. | Pre-requisite | Course # | Course Title | Cr Hrs. | Pre-requisite |
| | **Core Requirement** | **3** | | | **Core Requirement** | **3** | |
| | **Core Requirement** | **3** | | | **Core Requirement** | **3** | |
| | **Core requirement** | **3** | | | **Core Requirement** | **3** | |
| **EDUC 310** | **Foundation of Education & School Reform** | **3** | | **MATH 102** | **Calculus II** | **3** | |
| **MATH 101** | **Calculus 1** | **3** | | **MATH 220** | **Foundation of Mathematics** | **3** | |
| Total Credit Hours in Semester [15] | | | | Total Credit Hours in Semester [15] | | | |
| **Spring Semester** | | | | **Spring Semester** | | | |
| Course # | Course Title | Cr Hrs. | Pre-requisite | Course # | Course Title | Cr Hrs. | Pre-requisite |
| | **Core Requirement** | **3** | | | **Core Requirement** | **3** | |
| | **Core Requirement** | **3** | | | **Core Requirement** | **3** | |
| **EDUC 312** | **Curriculum & Assessment** | **3** | | **EDSE 331** | **Reading and Writing Across the Curriculum** | **3** | **EDUC 312** |

| Course # | Course Title | Cr Hrs. | Pre-requisite | Course # | Course Title | Cr Hrs. | Pre-requisite |
|---|---|---|---|---|---|---|---|
| EDUC 320× | Human Development | 3 | | MATH 222 | Real Analysis I | 3 | |
| STAT 101 | Statistics I | 3 | | EDUC 317 | Inclusive Classroom | 3 | |
| MATH 231 | Linear Algebra | 3 | | PHYS 101 | General Physics 1 | 3 | |
| Total Credit Hours in Semester [18] | | | | Total Credit Hours in Semester [18] | | | |

| THIRD YEAR [33] credit hours) | | | | FOURTH YEAR [33] credit hours) | | | |
|---|---|---|---|---|---|---|---|
| Fall Semester | | | | Fall Semester | | | |
| Course # | Course Title | Cr Hrs. | Pre-requisite | Course # | Course Title | Cr Hrs. | Pre-requisite |
| | Core Requirement | 3 | | EDSE 464 | Methods II: Inquiry and ICT for Mathematics | 3 | EDSE 344 |
| EDUC 319 | Classroom Assessment | 3 | EDUC 310, 312 &320 | MATH 341 | Modern Geometry | 3 | |
| EDUC 201 | Elective (Research methods) | 3 | | | ELECTVE (Education) | 3 | |
| MATH 213 | Differential Equations | 3 | | MATH 335 | Number Theory | 3 | |
| MATH 211 | Calculus III | 3 | | MATH 366 | Numerical Analysis I | 3 | |
| Total Credit Hours in Semester [15] | | | | Total Credit Hours in Semester [15] | | | |
| Spring Semester | | | | Spring Semester | | | |
| Course # | Course Title | Cr Hrs. | Pre-requisite | Course # | Course Title | Cr Hrs. | Pre-requisite |
| EDSE 344 | Methods I: Instructional Strategies in Mathematics | 3 | EDSE 331 | EDSE 491 | Student Teaching in Secondary Education | 9 | EDSE 344 and EDSE 464 |
| MATH 324 | Complex Analysis | 3 | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **EDUC 316** | **Classroom Management** | **3** | **EDUC 312** | | | | |
| **MATH 365** | **Scientific Computation and programming** | **3** | | | | | |
| **MATH 233** | **Abstract Algebra** | **3** | | | | | |
| Total Credit Hours in Semester [15] | | | | Total Credit Hours in Semester [9] | | | |

<span style="color:red">**× Students in the Primary Education Program ONLY must register EDUC 315 × Students in the Secondary Education Program ONLY must register EDUC 320**</span>