

# Post-Baccalaureate Certification in Mathematics

## Major Sequence and Requirements – Planning Guide

### I. Core Mathematics Requirements (pre-requisites indicated)

- \_\_\_\_\_ **MATH 161**: Calculus I
- \_\_\_\_\_ **MATH 211**: Calculus II (161)
- \_\_\_\_\_ **MATH 310/520**: Introduction to Proof (211)
- \_\_\_\_\_ **MATH 311**: Calculus III (211)
- \_\_\_\_\_ **MATH 322/502** Linear Algebra I (311, rec. 310)
- \_\_\_\_\_ **MATH 333/503** Introduction to Probability and Statistics (311)
- \_\_\_\_\_ **MATH 345/504** Abstract Algebra (310, 322)
- \_\_\_\_\_ **MATH 353** Survey of Geometry (310, 322)  
OR
- \_\_\_\_\_ **MATH 355/505** Transformational Geometry (310, 322)
- \_\_\_\_\_ **MATH 464** Real Analysis I (310, 311, 322, rec. 345)
  
- \_\_\_\_\_ **CSCI 161** Intro Computing I

**II. Mathematics Electives (minimum 2 courses) – select from: MATH 353\*, 355\*, 365, 370, 375, 393, 395, 422, 435, 445, 457, 465, 467, 471, 472, 483, 4X8, 535, 536, 566, 592 (\*cannot be double-counted from Core)**

**Note: some courses are dual listed as graduate courses and can be taken in preparation for a masters degree**

**MATH** \_\_\_\_\_

**MATH** \_\_\_\_\_

### III. Educational Core (4 courses, generally taken as 2 blocks, plus Student Teaching)

#### Foundations Block

1. \_\_\_\_\_ **EDFN 590** (or EDFN 211, 511, 603, 604)  
*and*
2. \_\_\_\_\_ **EDFN 545** (or EDFN 241, PSYC 525, 526, 625)

*and*

#### Professional Block

3. \_\_\_\_\_ **EDSE 321**: Issues in Secondary Education  
*and*
4. \_\_\_\_\_ **MATH 405**: Teaching Secondary Math (333, 345, 353/355)

*and*

#### Student Teaching

- \_\_\_\_\_ **EDMA 461**

### IV. Additional Requirements

**APS Requirements – see sheet upon acceptance**

**Content Portfolio Submissions – see department for information**

**Post-Baccalaureate: Timeline Planning Guide**  
*Including a Cross Reference of Sequence and Degree Requirements*

Fall-Spring-Summer: _____	Fall-Spring-Summer: _____	Fall-Spring-Summer: _____
Calculus 1: <b>MATH 161</b> (MPT) <b>COMM 100</b> : Speech	Calculus 2: <b>MATH 211</b> (161) <b>CSCI 161</b> <b>ENGL</b> Composition	Intro to Proof: <b>MATH 310/520</b> (211) Calculus 3: <b>MATH 311</b> (211) <b>ENGL</b> Lit course
Fall-Spring-Summer: _____	Fall-Spring-Summer: _____	Fall-Spring-Summer: _____
**Linear Algebra: <b>MATH 322/502</b> (311, rec. 310) **Probability & Statistics: <b>MATH 333/503</b> (311) **Foundations of Education: <b>EDFN 590/211</b> (clearances required) **Educational Psychology: <b>EDFN 545/241</b> (clearances required)	**Abstract Algebra: <b>MATH 345/504</b> (310, 322) **Geometry: <b>MATH 353/355/505</b> (310, 322) ** <b>MATH Elec</b> ** <b>MATH Elec</b>	**Real Analysis: <b>MATH 464/506</b> (310, 311, 322, rec. 345) ***Teaching of Secondary Math: <b>MATH 405</b> (333, 345, 353/355)* ***Issues in Secondary Education: <b>EDSE 321</b> *
Fall-Spring-Summer: _____	Fall-Spring-Summer: _____	Fall-Spring-Summer: _____
*** <b>EDMA 461</b> : Student Teaching*		

Pre-requisites are indicated in parenthesis.

Cross-listed courses or options are indicated with multiple course numbers listed.

\*denotes APS status needed – see School of Education for complete details. This includes a Communications course, an English Literature course, an English Composition course, a Minimum Overall GPA of 3.0, and all Field Experience clearances

\*\*denotes courses that MAY double-count toward the Masters of Education in Mathematics (M.Ed.). Important note, at most 2 courses below MATH 510 can be counted toward the Masters program.

\*\*\* these courses can be replaced with a full-year Post-Bacc Intern program in conjunction with the School District of Lancaster. Contact Miriam Witmer for more information on this option.