**BACHELOR OF SCIENCE IN Mathematics**

**CURRICULUM GUIDE
AND PROGRAM REQUIREMENTS CHECKLIST (2010-Su2012)**

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| Student:  | Major: Mathematics  |
| Laker ID:  | Semester:  |
| Advisement Dates: | Catalog Year:  |

A total of 120 credit hours are required for the Bachelor of Science in Mathematics.
All MATH courses must be with a grade of C or better. (A grade of S will satisfy this condition.)

No more than 3 credits of a grade of D can be used.

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| **Area A – Essential Skills (9 Credits)** |
| A1 | Complete Both Courses (6 credits) | Sem. | Grade | Credit | Comments |
|  | ENGL 1101 | English Comp. I |  |  | 3 |  |
|  | ENGL 1102 | English Comp. II |  |  | 3 |  |
| A2 | Complete One Course (3 Credits) |  |  |  |  |
|  | MATH 1112 | Trig & Anal. Geo. |  |  | 3 |  |
|  | MATH 1113 | Pre-Calculus |  |  | 3 |  |
|  | MATH 1501 | Calculus I |  |  | 3\* |  |
| \* MATH 1501 is a 4 credit course. The remaining 1 credit will be applied to Area F.  |
| **Area B – Critical Thinking & Communication Skills (4 Credits)** |
| B1 | Critical Thinking (3 Credits) |  |  |  |  |
|  | CRIT 1110 | Critical Thinking |  |  | 3 |  |
| B2 | Complete one course (1 Credit) |  |  |  |  |
|  | COMM 1001 | Pres. Speaking |  |  | 1 |  |
|  | COMM 1002 | Pres. Applications |  |  | 1 |  |
|  | COMM 1110 | Spoken Comm. |  |  | 1\*\* |  |
|  | FREN 1002 | Elem. French II |  |  | 1 |  |
|  | SPAN 1002 | Elem Spanish II |  |  | 1 |  |
| \*\* COMM 1110 is a 3 credit course. The remaining 2 credits will be applied to the General Electives |
| **AREA C – Humanities (6 Credits)** |
| C1 | Complete one course (3 Credits) |  |  | 3 |  |
|  | ENGL 2111 | World Literature |  |  | 3 |  |
|  | ENGL 2112 | World Literature |  |  | 3 |  |
|  | ENGL 2121 | British Literature I |  |  | 3 |  |
|  | ENGL 2122 | British Literature II |  |  | 3 |  |
|  | ENGL 2131 | American Literature I |  |  | 3 |  |
|  | ENGL 2132 | American Literature II |  |  | 3 |  |
|  | FREN 2001 | Inter. French I |  |  | 3 |  |
|  | FREN 2002 | Inter. French II |  |  | 3 |  |
|  | PHIL 2201 | Intro to World Philosophy |  |  | 3 |  |
|  | PHIL 2601 | Ethics/Hist/Cntmpry Pers. |  |  | 3 |  |
|  | SPAN 2001 | Inter.Spanish I |  |  | 3 |  |
|  | SPAN 2002 | Intermediate Spanish II |  |  | 3 |  |

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| C2 | Complete one course (3 Credits) | Sem. | Grade | Credit | Comments |
|  | ART 2301 | Art of the Pre-Modern World |  |  | 3 |  |
|  | ART 2302 | Art of the Modern World |  |  | 3 |  |
|  | CMS 2100 | Introduction to Film |  |  | 3 |  |
|  | FREN 2001 | Intermediate French I |  |  | 3 |  |
|  | FREN 2002 | Intermediate French II |  |  | 3 |  |
|  | MUSC 2101 | Music Appreciation |  |  | 3 |  |
|  | MUSC 2103 | Introduction to World Music |  |  | 3 |  |
|  | PHIL 2401 | Introduction to Aesthetics |  |  | 3 |  |
|  | SPAN 2001 | Intermediate Spanish I |  |  | 3 |  |
|  | SPAN 2001 | Intermediate Spanish II |  |  | 3 |  |
|  | THEA 1100 | Theater Appreciation |  |  | 3 |  |
| **Area D - Natural Sciences and Mathematics (11 hours)** |
| D1 | Complete 1 Science Sequence with Labs (B, C, or P) (8 hours)  | Sem. | Grade | Credit | Comments |
| B | BIOL 1107 | Principles of Biology I |  |  | 3 |  |
| B | BIOL 1107L | Principles of Biology Lab I |  |  | 1 |  |
| B | BIOL 1108 | Principles of Biology II |  |  | 3 |  |
| B | BIOL 1108L | Principles of Biology Lab II |  |  | 1 |  |
| C | CHEM 1211 | Principles of Chemistry I |  |  | 3 |  |
| C | CHEM 1211L | Principles of Chemistry Lab I |  |  | 1 |  |
| C | CHEM 1212 | Principles of Chemistry II |  |  | 3 |  |
| C | CHEM 1212L | Principles of Chemistry Lab II |  |  | 1 |  |
| P | PHYS 2211 | Principles of Physics I |  |  | 3 |  |
| P | PHYS 2211L | Principles of Physics Lab I |  |  | 1 |  |
| P | PHYS 2212 | Principles of Physics II |  |  | 3 |  |
| P | PHYS 2212L | Principles of Physics Lab II |  |  | 1 |  |

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| D2 | Mathematics (3 Credits) | Sem. | Grade | Credit | Comments |
|  | MATH 15011 | Calculus I |  |  | 3\* |  |
|  | MATH 2502 | Calculus II |  |  | 3\* |  |
| 1. MATH 1501 cannot be used in Area D2 if used in Area A2 |
| \* MATH 1501 and MATH 2502 are 4 credit courses. The remaining 1 credit will be applied to Area F. |
| **Area E – Social Sciences (12 Credits)** |
| E1 | American Government (3 Credits) | Sem. | Grade | Credit | Comments |
|  | POLS 1101 | Amer. Government |  |  | 3 |  |
| E2 | World History (3 Credits) |  |  |  |  |
|  | HIST 1111 | Survey Pre-Modern World History |  |  | 3 |  |
|  | HIST 1112 | Survey Modern World History |  |  | 3 |  |
|  | HIST 2750 | Critical Trends and Issues in World His. |  |  | 3 |  |
| E3 | American History (3 Credits) |  |  |  |  |
|  | HIST 2111 | Survey U.S. History to 1877 |  |  | 3 |  |
|  | HIST 2112 | Survey U.S. Hist. Since Reconst. |  |  | 3 |  |
| E4 | Behavioral Sciences (3 Credits)  |  |  |  |  |
|  | SOCI 1101 | Intro. to Soc. |  |  | 3 |  |
|  | PSYC 1101 | Intro. to Psych. |  |  | 3 |  |
|  | WST 2010 | Intro. to Women’s Studies |  |  | 3 |  |
|  | AFAM 2010 | Intro. to African-Amer. Studies |  |  | 3 |  |
| **Area F. Courses Related to Major (18 Credits)** |
| Required Course ( 9 or 12 Credits) | Sem. | Grade | Credit | Comments |
|  | MATH 1231 | Intro. to Statistics |  |  | 3 |  |
|  | MATH 1501 | Calculus I |  |  | 1 |  |
|  | MATH 2020 | Intro. to Discrete Mathematics (3only if MATH 2502 is used in Area D2) |  |  | 0 or 3 |  |
|  | MATH 2140 | Intro. to Linear Alg. |  |  | 3 |  |
|  | MATH 2502 | Calculus II |  |  | 1or 4 |  |
|  | MATH 2503 | Calculus III |  |  | 4 |  |
| One Programming Class (3 Credits) |  |  |  |  |
|  | CSCI 1301 | Computer Science I |  |  | 3 |  |
|  | CSCI 1371 | Computing for Engineers |  |  | 3 |  |

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| **Upper Division Mathematics Classes (27 Hours)** |
| Required (27 Credits) | Sem. | Grade | Credit | Comments |
|  | MATH 3005 | Transitions to Higher Mathematics |  |  | 3 |  |
|  | MATH 3006 | Communications in Mathematics |  |  | 1 |  |
|  | MATH 3110 | Survey of Algebra |  |  | 3 |  |
|  | MATH 3220 | Applied Statistics |  |  | 3 |  |
|  | MATH 3303 | ODE |  |  | 3 |  |
|  | MATH 3520 | Intro. to Analysis |  |  | 3 |  |
|  | MATH 4050 | Modern Meth. In Teaching Math. |  |  | 4 |  |
|  | MATH 4231 | Modern Geometry |  |  | 3 |  |
|  | MATH 4250 | Elem. Number Theory |  |  | 3 |  |
|  | MATH 4988 | Directed Research |  |  | 1 |  |
|  | MATH 4989 | Senior Capstone Experience |  |  | 0 |  |
| **Required Courses for Certification (27 credits if MATH 2020 is in Area F or 30 credits otherwise.)** |
|  | MATH 2020 | Intro. to Discrete Math. (3only if MATH 2020 is used in Area F) |  |  | 0 or 3 |  |
|  | EDUC 2110 | Investigating Critical & Contemp. Issues in Education |  |  | 3 |  |
|  | EDUC 2120 | Exploring Socio-Culture |  |  | 3 |  |
|  | EDUC 2130 | Exploring Teaching & Learning |  |  | 3 |  |
|  | EDUC 3030 | Exploring-Exceptional Learner |  |  | 3 |  |
|  | EDUC 3200 | Secondary School Curr. and Assess.  |  |  | 3 |  |
|  | EDUC3210 | Classroom Methods and Management |  |  | 3 |  |
|  | EDUC 4003 | Sec. Level Sem. |  |  | 1 |  |
|  | EDUC 4730 | Secondary Level Internship  |  |  | 8 |  |
| **General Electives (6 credits if MATH 2020 is used in Area F or 3 credits otherwise)** |
| May not include: MATH 1101, MATH 1111, MATH 1112, MATH 1241, MATH 3010, MATH 3020, MATH 3030, MATH 3902, MATH 4020 |
|  | Carry over from Area B |  |  |  | 0 or 2 |  |
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| **IMPORTANT NOTES:****All MATH courses and Area F courses require a grade of “C” or better.**  **student may use at most one course with a grade of D.t the 2000 or above level (Excluding BIOL** (A grade of “S” will satisfy this condition.)**A student may use at most one course with a grade of “D”.****Individual with disabilities who need to request accommodations should contact the Disability Resource Center, Student Center 255, (678) 466-5445, or** **DisabilityResourceCenter@Clayton.edu** |

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| **DOCUMENTATION FOR COURSE SUBSTITUTIONS FOR ABOVE COURSES**  |
| AREA | REQ. COURSE | SUBSTITUTION | CR. HRS | COMMENTS |
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**A grade of C or better is required for all mathematics and education courses applied towards the major.**

# TOTAL CREDIT HOURS: 120

# Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Advisor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Date: