**Mathematics Major (Applied Mathematics Specialization) BS Degree,**  **Course Units (128 credits) AY 2019-20**

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| Name:       |  | Updates |
| TCNJ ID:      | TCNJ Entry:       | Major Entry:      |       |       |       |
| 2nd Major:  | 1st Minor: | 2nd Minor:  |       |       |       |
| Earned Hours:       | GPA:       | Major GPA:      |       |       |       |
| **Liberal Learning Breadth Requirements****NOTE: courses in *italics* are also listed as major and/or correlate courses.** | **Major Program Requirements****NOTE: courses in *italics* are also listed as liberal learning courses.****15 Mathematics, 1 Mathematics/ Liberal Learning, 3 Correlate/ Liberal Learning courses as listed:** | **Civic Responsibilities, Proficiencies & Electives** |
|  **Courses Grade** |  **Courses Grade** |  **Courses Grade** |
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| **Indicate Option Met:** |
| **[ ]  Designated Interdisciplinary Concentration (A)** (Attachment) |
| [ ]  **Second Major (A)** (Attachment) |
| [ ]  **Self-Designed Interdisciplinary Concentration (B)** (Attachment)      |
| [ ]  **Breadth Distribution List (C) -- 8 Courses:** |
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| **Arts & Humanities/Social Science & History – 5 courses.**  |
| 1 course unit in Literary, Visual, Performing Arts (LVPA) |  |
| 1 course unit in World Views/Ways of Knowing (WVWK) |  |
| 1 course unit in Behavioral, Social or Cultural Perspectives (BSCP) |  |
| 1 course unit in Social Change in Historical Perspective (SCHP) |  |
| 1 additional course unit in LVPS, WVWK, BSCP, or SCHP |  |
| **Natural Sciences & Quantitative Reasoning– 3 Courses** Natural Science (at least one lab); Quantitative Reasoning (at least one from each) |
| **MAT 127***: Calculus A* |  |
| **CSC 220***: Comp Sci. I* |  |
| **BIO 201, CHE 201, or PHY 201**  |  |

**Transfer Information**:School       Credit Accepted:     School       Credit Accepted:     School       Credit Accepted:     Pending:       |

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| **Correlate Courses: 2 or 3 Courses** |
| **BIO 201, CHE 201, or PHY 201**  |  |
| **CSC 220** Comp. Sci. I and either **CSC 230** Comp. Sci. II or **MAT 341**: Computational Math**;** or **CSC 250** Accelerated Comp. Sci I & II. (Courses may not count towards depth requirement.) |  |

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| **Major Core: 9** Courses |
| **MAT 128** Calculus B |  |
| **MAT 200** Proof Writing |  |
| **MAT 205** Linear Algebra |  |
| **MAT 229** Multivar. Calc. |  |
| **MAT 2xx:** Soph. Seminar |  |
| **MAT 310** Real Analysis |  |
| **MAT 326** Differential Equations |  |
| **MAT 498** Capstone |  |
| **STA 215:** Statistical Inference or **STA 216:** Statistical Inference and Probability |  |

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| **Math/Stat Options: 6** Course Units. At least one Applied Math 4xx course. Three 300/400-level courses from Applied Math option list. Two courses must be chosen to satisfy the Applied Math depth require-ment (see PAWS/Math website for details). At most two STA 300+ courses, and at most one non MAT/STA course from the approved list can count towards this 6 course unit requirement.  |
| **MAT 4xx** Applied Math course |  |
| Depth req. Course #1 |  |
| Depth req. Course #2 (if not satisfied by MAT 4xx |  |
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| **Major non-credit requirement:**[ ]  **MAT 099** Orientation Sem.  |
| **Retention and Graduation Requirements:**1. Minimum GPA of 2.00. A 2.5 GPA in the courses MAT 127, 128, 200, 205, 229.
2. Minimum of 6 units in the major must be earned in the department. A minimum of 4 of the final 6 units must be earned in the department.
3. At least C- in all MAT/STA courses with the following exceptions: at most one grade of D or D+ in a MAT/STA 3xx/4xx course that is not a prerequi-site for another course**.** At least C in CSC 220.
4. At most one course unit of independent work courses MAT 39x, 49x, STA 39x, STA 49x can count as options.
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**Waivers & Substitutions**

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| **Civic Responsibilities –** May be met through Courses, Programs or Sustained Experiences |
| [ ] **Community Engaged Learning** |
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| [ ] **Gender** |
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| [ ]  **Global Perspective** |
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| [ ]  **Race & Ethnicity** |
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| **Intellectual & Scholarly Growth:**  |
| **WRI 101 (if required)**  |  |
| **WRI 102 (if required)** |  |

 **Writing Intensive Courses: 3**

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| **FSP First Seminar**  |  |
| **Other** |  |
| **MAT 498 Capstone**  |  |

**[ ]  Information Literacy**On-Line Library

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| [ ]  **Second Language** Demonstrated proficiency at the Third Level (0-3 Courses Based on Placement) |
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| [ ]  Not Applicable |

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| **Electives**  Courses (as needed to earn 32 course units for graduation, generally 5-6). |
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| **Placement Deficiencies Met With** |
| [ ]  Not Applicable |
| [ ] Math |       |  |
| [ ] Verbal |       |  |

Evaluator Approval: |