**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** | | | |
| |  |  | | --- | --- | | **Indicate Option Met:** | | | **Designated Interdisciplinary Concentration (A)** (Attachment) | | | **Second Major (A)** (Attachment) | | | **Self-Designed Interdisciplinary Concentration (B)** (Attachment) | | | **Breadth Distribution List (C) -- 8 Courses:** | | |  | | |  | | | **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: | | |  |  | | --- | --- | | **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.) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | **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 |  | | |  | | |  |  | | --- | --- | | **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 |  | |  |  | |  |  | |  |  | | | **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. |   **Waivers & Substitutions**   |  | | --- | | **for** | | **for** | | | | |  |  | | --- | --- | | **Civic Responsibilities –** May be met through Courses, Programs or Sustained Experiences | | | **Community Engaged Learning** | | |  |  | | **Gender** | | |  |  | | **Global Perspective** | | |  |  | | **Race & Ethnicity** | | |  |  |  |  |  | | --- | --- | | **Intellectual & Scholarly Growth:** | | | **WRI 101 (if required)** |  | | **WRI 102 (if required)** |  |   **Writing Intensive Courses: 3**   |  |  | | --- | --- | | **FSP First Seminar** |  | | **Other** |  | | **MAT 498 Capstone** |  |   **Information Literacy**  On-Line Library   |  |  | | --- | --- | | **Second Language**  Demonstrated proficiency at the Third Level (0-3 Courses Based on Placement) | | |  |  | |  |  | |  |  | | Not Applicable | |  |  |  |  |  | | --- | --- | --- | --- | | **Electives**  Courses (as needed to earn 32 course units for graduation, generally 5-6). | | | | |  | | |  | |  | | |  | |  | | |  | |  | | |  | |  | | |  | |  | | |  | |  | | |  | | **Placement Deficiencies Met With** | | | | | Not Applicable | | | | | Math |  |  | | | Verbal |  |  | |   Evaluator Approval: | | | |