## Advising Newsletter **Department of Mathematics and Statistics**

Dear Majors and Minors in the Department of Mathematics and Statistics:

Registration for Spring and Summer 2026 classes will begin on November 4<sup>th</sup>. To prepare for registration, all majors will meet with their advisors, and minors are also encouraged to do so. You will hear from your advisor soon regarding scheduling for your advising appointment. In advance of your appointment, please review your academic requirements page in PAWS, consider your educational and career goals, and identify potential courses for the spring semester.

Here are several department announcements that you should be aware of:

## 1. Highlights:

- Course offerings: A list of the upper-level course offerings for the spring semester may be found at the end of this letter. Note that this includes the following courses which are not offered every semester: MAT 301: Number Theory (Hagedorn); MAT 310: Real Analysis (Kardos); MAT 331: Numerical Analysis (Clark); MAT 370: Topics in Mathematics Combinatorics (Reimer); STA 305: Regression Analysis (Sokolov); STA 307 Data Mining & Predictive Modeling (Nardini).
- Spring 2026 Capstone Courses: Current seniors planning to graduate in May 2026 and current juniors planning to graduate in December 2026 with a Mathematics or Applied Mathematics Specialization should enroll in MAT 498 with Dr. Marcus. Students with a Data Science & Statistics Specialization should enroll in STA 498 with Dr. Gevertz. Any Juniors wishing to take the Capstone course should contact Dr. Weber for permission.
  - <u>Math Secondary Education seniors</u> who are doing Clinical II in the Spring should enroll in Dr. Liebars' section of SED 498.
- Seminar requirement: Math/Stat majors must attend four department colloquia in their junior year or fall semester of senior year as a prerequisite for their capstone course. All students should attempt to meet this expectation. If you should take a capstone course this spring but cannot meet the seminar requirement, please discuss this with your advisor and contact Dr. Weber.
- Mathematical Sciences BA: The department now offers a BA in Mathematical Sciences. This option is appropriate for students who are seeking extra space in their schedule for other activities at the college, such as a second major or study abroad. This degree allows students to take a wider variety of courses outside of mathematics and to have more opportunities for interdisciplinary studies. This degree may also be advantageous for transfer students seeking flexibility to meet their graduation timeline. For more information on the new Mathematical Sciences BA, please see <a href="https://mathstat.tcnj.edu/mathematics-ba/">https://mathstat.tcnj.edu/mathematics-ba/</a>.
- 2. Research, Internship, and Learning Assistant courses: The department encourages students to engage in undergraduate research under the mentorship of a faculty member, to pursue academic credit for internships, and to explore pedagogy by acting as a learning assistant. Details about these opportunities are available on the website or by contacting Dr. Weber or Dr. Liebars, and of course you are welcome to talk to your advisor or to a professor whom you would like to do research with about these options. In addition, Dr. Liebars will send an email soon regarding Learning Assistant options.

- 3. Sophomore Seminar and academic load: The sophomore seminar (MAT 275 taught by Dr. Schmoyer for the Spring 2026 semester) is a half unit course normally taken in the sophomore year by non-education students majoring in one of the mathematics specializations. Many of our students enroll in 4.5 (or occasionally 3.5) units for the spring. Some students may want to enroll in a half- unit course to complement the sophomore seminar. A half-unit research or guided study course may be an option. The Department of Computer Science will offer CSC 271 Discrete Structures for Math Majors (a half unit course for students wishing to take upper-level computer science courses or to pursue a minor in computer science) if at least three students are interested. Students should contact Dr. Salgian (Chair of CS), if interested. Finally, there are several spring half-unit courses offered in the School of Business: FIN201, IST201, and MKT201.
- 4. **Departmental Honors**. To earn departmental honors, students must have at least a 3.5 GPA in mathematics and statistics courses, complete an Independent Research 493 course during the junior year or the fall of the senior year, write a thesis, and give a research talk. Interested students should reach out to a potential research mentor by their junior year to discuss possible research projects.
- 5. **Study abroad:** The department encourages students to consider study abroad opportunities. Students considering study abroad should discuss this with their advisors. Explore links from our website:

Study Abroad and Study Away | Mathematics and Statistics at TCNJ

## College Core Requirements for Mathematics Majors - All Specializations

The list of approved college courses for the College Core requirements can be found at:

Approved Courses for College Core | The College Core (tcnj.edu)

A new search tool for identifying these courses is available here: <u>College Core Course Search Tool</u>

6. **Waitlists and seat reservations**. The Class Waitlist is available in PAWS. Previous methods for waitlisting classes have been discontinued and students can now place themselves on a waitlist. For more information about waitlists, please visit the <u>Waitlist website</u> where step-by-step instructions are provided to students.

Some courses have seat reservations to help ensure that students from different specializations and majors can take the course. If you are unable to register for an open section due to seat reservations, please try to register for another section of the course. If none fit your schedule, please add your name to the waitlist.

- 7. *Minors:* Students with minors should plan their schedule so that they can complete the minors, if possible, before their last TCNJ semester. A few students have experienced problems where a required course for the minor conflicts with the required capstone for their major.
- 8. **Required courses for graduation:** As you plan your schedule, please remember that you must complete all required courses, both for your major and for the College Core, in order to graduate. **Please note:** New Fall 2025 first-year or transfer students are subject to the new degree minimum of 30 units. This is reflected in their AR reports in PAWS. Any student who changes their major effective Fall 2025 or later will also be subject to the new degree minimum. This will require an adjustment in order to be reflected on their AR report and Records & Registration will make those adjustments. All other continuing students are subject to the degree requirements in effect at the time of their program admission (32 units).

- Computer Science courses: Math majors interested in taking upper-level computer science courses or pursuing a Computer Science minor need to take CSC 270 or the half-unit course CSC 271. Students interested in taking this course this spring should contact Dr. Salgian (Chair of Computer Science).
- 10. **Differential Equations**. Students considering the Applied Mathematics specialization should take MAT 326: Differential Equations as early as possible in their college career, ideally no later than the end of the sophomore year.
- 11. **Math Secondary Ed Program Changes:** The MAT 310 requirement has been removed. One of the MAT/STA options is now a choice from MAT 310, MAT 316, or MAT 326.
- 12. *Mathematical Statistics (STA 410):* Only being offered every other spring semester. Thus, all Data Science and Statistics majors who have taken MAT 316 should plan to take STA 410 in the spring of 2027.
- 13. Prerequisite Changes: Prerequisites have been updated for the following courses: MAT 205: Linear Algebra; STA 303: Design of Experiments; STA 304: Sampling and Nonparametric Statistics; STA 305/Regression Analysis; STA 306/Applied Multivariate Analysis; STA 307/Data Mining and Predictive Modeling; STA 308/Applied Time Series and Forecasting; STA 309/Text Mining; STA 314/Statistical Quality Control; STA 370/Topics in Statistics; STA 410/Mathematical Statistics; STA 494/Seminar in Statistics. Please see <a href="https://mathstat.tcnj.edu/information-for-students/courses-2/courses/">https://mathstat.tcnj.edu/information-for-students/courses-2/courses/</a> for details.
- 14. Preparing for future Capstone Courses: Students should plan their schedules so that they meet the prerequisites listed for their capstone course. In addition, all students must attend four seminar/colloquium presentations in their junior and senior years prior to enrolling in the capstone course. Please consult the appropriate webpage for your specialization, paying special attention to Options and Correlates; your four-year planner, Checklist for graduation, Science Requirements and other important information:
  - For Applied Mathematics Specialization Students:
     Mathematics (Applied Mathematics specialization) | Mathematics and Statistics at TCNJ
  - For Mathematics Specialization Students:

    Mathematics (Mathematics specialization) | Mathematics and Statistics at TCNJ
  - For Data Science and Statistics Specialization Students:
     Mathematics (Data Science and Statistics) | Mathematics and Statistics at TCNJ
  - For Mathematics Secondary Education Students:
     Mathematics Secondary Education | Mathematics and Statistics at TCNJ
  - For Mathematical Sciences, BA Students:
     Mathematics (Mathematical Sciences, BA) | Mathematics and Statistics at TCNJ

We wish you a successful registration session. Please write or see us if you have any questions! Sincerely,

Dr. Su Weber

Chair, Department of Mathematics and Statistics

## **Upper Level Course Offerings for Spring 2026**

MAT 301: Number Theory MAT 310: Real Analysis

MAT 326: Differential Equations MAT 331: Numerical Analysis\*

**MAT 370:** Topics in Mathematics – Combinatorics\*

MAT 497: Topics in Secondary Mathematics from an Advanced Viewpoint

MAT 498: Capstone

MTT 490: Clinical Practice II

SED 498: Mathematics Secondary Education Capstone

STA 305: Regression Analysis

STA 307: Data Mining & Predictive Modeling\*

STA 498: Statistics Capstone

<sup>\*</sup> **Bold** indicates a course that is not offered every year.