Advising Newsletter **Department of Mathematics and Statistics**

Dear Mathematics and Statistics Majors and Minors,

Registration for Fall 2012 classes will take place April 3-13 and advising will begin shortly. Your advisors should be contacting you to arrange a time to meet to discuss your academic plans, progress, and future goals. You may also reach out to your advisor to schedule an appointment. Please discuss specific individual questions with your advisor when you meet. But as there have been a number of changes in the Department this year, we wanted to send out a general informational announcement.

- 1. *Applied Mathematics Specialization*. The Applied Mathematics Specialization has been officially approved by the College. It will be offered as of the beginning of the Fall 2012 semester. We are working with Records & Registration to implement it on PAWS. Once that is done, students will be able to file change of major forms.
- 2. Applied Mathematics Advising Sessions. There will be two more specialized advising sessions for students interested in the applied mathematics specialization. The sessions will be on Monday March 19 and Tuesday March 20 from 11:30-12:20. Interested students should sign up for one of the sessions in the departmental office with Laurie Wanat (wanatl@tcnj.edu) by Friday, March 16th at 4:30. These sessions are in addition to normal advising and students should still meet with their regular academic advisor.
- 3. *Waiting Lists*. This spring, the Department will have a wait list for all closed classes. If a class is closed, you should fill out the Google form -- found at the link on our web site, at

http://tinyurl.com/TCNJWaitList or at

https://docs.google.com/spreadsheet/viewform?formkey=dDc0SlhkYTJraGllTHhDTzdyei1OWnc 6MQ#gid=0

- -- to be placed on the wait list. As students change courses, and spots open up in closed classes, the Department will fill the spots with students from the wait-list. Please note that the college offers multiple sections of a course to accommodate students with a compelling need to take a particular section. The wait list should be used only when there is a closed section that you need to enroll in.
- 4. *Independent Study Courses*. The Department encourages all students to do independent study, guided study, and independent research courses. However, we feel that students learn best in a regular course with many other students. As a result, the Department adopted the following rule last Spring limiting when an independent study/guided study/independent research course can be taken.

- At most one course unit of Independent Study, Guided Study, or Independent Research may count as one of the "Mathematics options" or "Statistics options" listed in the major requirements under "Courses in the major".
- The total course load of a student taking Independent Study, Guided Study, or Independent Research should be at most 4.5 course units.
- Independent Study, Guided Study, or Independent Research may not be taken in order to improve a grade, or to replace a course that a student failed to sign up for.
- A minimum 3.0 GPA in courses taken in the Department of Mathematics and Statistics is required of any student enrolling in Independent Study or Guided Study.
- 5. Perspectives on the Development of Mathematics. Beginning next fall, MAT 255 will only be offered in the fall semester. There will be two sections of the course offered each fall.
- 6. Capstone Courses. For Liberal Arts Mathematics Majors and Applied Mathematics Majors, the Department has changed the capstone requirement. Next year, to satisfy the capstone requirement, majors will need to take a regular 1 course unit (4 credit) course in their senior year. The course number and name will be still be MAT 498: Capstone, but the capstone will be a regular course that meets with an instructor. The capstone course does not count as one of the required math options or applied math options for the major. It is in addition to those courses. It results in reducing the number of electives needed to graduate by 1.

For statistics majors, the capstone (STA 498) will also become a 1 course unit (4 credit) course. The statistics capstone was already changed this year, and next year's capstone will be similar, but with a project analyzing data using SAS as an additional component.

- 7. Scheduling of Capstone Courses. Due to the changes listed above, the capstone courses MAT 498 and STA 498 will only be offered in the Spring semester, beginning next year. Majors expecting to graduate at the end of the Fall 2012 semester will complete their capstone requirement by doing a capstone under the current model. Majors expecting to graduate in Fall 2013, or subsequent fall semesters, should plan to take their capstone course in the preceding Spring semester.
- 8. Math Options Courses. Next year, in addition to the usually scheduled courses that are listed at (http://mathstat.pages.tcnj.edu/files/2011/06/CourseOfferingsS12revision.xls), the Department is offering the following mathematics options courses:

Fall 2012 Semester:

MAT 370-01: Topics in Mathematics (Topic: Computational Mathematics), Prof. Conjura MAT 370-02: Topics in Mathematics (Topic: Mathematical Biology), Prof. Gevertz MAT 405: Topology, Prof. Curtis

Spring 2013 Semester:

MAT 315: Topics in Linear Algebra, Prof. Clark MAT 440: Mathematical Logic, Prof. Alves

9. Sections of Courses. Here are the currently anticipated number of sections to be offered for the upper level courses in the major:

Fall 2012 Semester (# of sections) MAT 301: Number Theory (1) MAT 305: Abstract Algebra (2) MAT 316: Probability (2) MAT 326: Differential Equations (2) MAT 351: Geometry (1) MTT 490: Student Teaching (2) MAT 310: Real Analysis (1) MAT 370-01: Computational Mathematics (1) MAT 370-02: Mathematical Biology (1) MAT 405: Topology (1) MTT 380: Methods of Teaching Mathematics I (2) STA 305: Regression Analysis (2) STA 306: Applied Multivariate Analysis STA 410/ MAT 318: Mathematical Statistics (1)

Spring 2012 Semester (# of sections)
MAT 301: Number Theory (2)
MAT 305: Abstract Algebra (1)
MAT 316: Probability (1)
MAT 326: Differential Equations (1)
MAT 351: Geometry (1)
MTT 490: Student Teaching (4)

MAT 315: Topics in Linear Algebra (1)
MAT 440: Mathematical Logic (1)
MAT 454: Seminar in Applied Mathematics
(Topic: Mathematical Modeling) (1)
MTT 390: Methods of Teaching Mathematics
II (1)
STA 304: Sampling and Nonparametric
Statistics (1)
STA 307: Data Mining and Predictive
Modeling (1)

STA 318: Operations Research (1)

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

Sincerely,

Professors Hagedorn and Liebars Co-Chairs of the Department of Mathematics and Statistics