Math 3343 - Combinatorics I
Fall 2014

Instructor: Dr. Brian K. Miceli

Course URL: http://trinity.edu/bmiceli

All of the instructor’s contact information and office hours can be found at the above URL. In addition, all information which is pertinent to this course, including a copy of this syllabus and all information regarding exams and homework assignments, can be found at the above web page by following the proper links.

Time and Place: MW 2:30 PM - 3:45 PM, Center for Sciences & Innovation (CSI), Room 337.

Office Hours: My office is located in MMH 115F. For the exact times of office hours, consult the Course URL. I will also be available by appointment.


Prerequisites: A passing grade in Math 2326/3326 or consent of instructor.

Course Content: This is first and foremost a course in problem-solving and communication. Topics will include, but are not limited to, basic enumeration, inclusion/exclusion, the pigeonhole principle, recursions, generating functions, and bijective proofs. This course will entail a mix of computational methods and basic proof techniques.

Expectations: Each student is expected to invest a significant amount of work and thought outside the classroom for every hour of lecture. Moreover, work submitted for evaluation in this course will be graded in a most rigorous fashion, and thusly, such work should have a great deal of thought and care put into it. Work which is sloppy or messy or that which is not written in a clear and coherent fashion will be marked down. This includes losing points for grammatical errors, spelling mistakes and similar offenses.

Homework: Homework assignments will be due every Wednesday at the beginning of class unless otherwise stated and each student’s lowest score will be dropped at the end of the semester. Homework will be assigned after every Wednesday and that assignment will then be posted on the web page. There may be many problems assigned; however, each Monday a subset of the total problems assigned will be selected to be turned in on Wednesday. Students will be responsible for all problems on an assignment, whether collected or not. Except for extreme circumstances, late homework will not be accepted for any reason, and unexcused late and missing papers will be given a grade of zero (0). Graded homework exercises are to be written neatly using one side of 8.5 × 11 inch paper, and multiple pages must be stapled together before you come to class. Each problem must be done on its own page, and each page should contain the student’s name, the date and the problem number. Do not use paper from a spiral notebook unless you can tear off the ragged edge.

Collaboration is a very important part of mathematics, and I encourage everyone to work together on homework assignments. That being said, it is never acceptable to simply pass off someone else’s work or ideas as your own. Therefore, you must cite sources on any work that is to be turned in for a grade, whether it is from a textbook or from another student in class. Citing sources and giving credit to others for their ideas is a crucial part of any higher level of education, and this rule is not to be taken lightly, but also understand that you will in no way be penalized for quoting a textbook or getting a proof idea from a classmate as long as everything is cited properly.
**Midterm Exams:** There will be one evening midterm exam during the semester. The date, time, and location for this exam will be announced in class and posted to the course web page as they become more concrete. If you have a legitimate conflict with the exam date/time once they are selected, please contact the instructor as soon as possible. Please do not wait until shortly before the exam.

**Final Exam:** A cumulative, take-home exam will be given at the end of the semester. As the end of the semester comes closer, more information will be given as to the exact guidelines regarding this exam.

**Attendance:** Attendance is highly encouraged but is not mandatory. Roll will not be taken, but excessive absences should be explained to the instructor.

**Grades:** Your overall score in the course will be based upon your scores on the homework, midterm exams, and the final exam. The point values are as follows:

- Homework: 70%
- Exams: 15%
- Final Exam: 15%

Your letter grade will be determined by your overall percentage at the semester’s end, as well as by how well the class performs overall.

**Academic Integrity:** All students are covered by a policy that prohibits dishonesty in academic work, The Academic Honor Code. The Honor Code asserts that the academic community is based on honesty and trust, provides for a procedure to determine if a violation has occurred and what the punishment will be, and provides for an appeal process. Under the Honor Code, a faculty member will (or a student may) report an alleged violation to the Academic Honor Council. It is the task of the Council to investigate, adjudicate, and assign a punishment within certain guidelines if a violation has been verified. Students who are under the Honor Code are required to pledge all written work that is submitted for a grade: “On my honor, I have neither given nor received any unauthorized assistance on this work” and their signature. The pledge may be abbreviated “pledged” with a signature.

**Disability Services for Students:** If you have a documented disability and will need accommodations in this class, please speak with the instructor privately early in the semester so that he may be prepared to meet your needs. If you have not already registered with Disability Services for Students, contact the office at 999-7411. You must be registered with DSS before he can provide accommodations.