

# MATH 4321/5321 – Combinatorics Spring – 2021

**Professor:** Dr. Kassie Archer

**Office:** RBN 4008

**Email:** karcher@uttyler.edu (preferred method of contact)

**Office Hours:** TBD

**Scheduled lecture:** MW, 2:30 A.M. – 3:55 A.M., Location: RBN 4027

**Textbooks:** Two texts available online:

- *Combinatorics Through Guided Discovery* by Kenneth Bogart, ([see link here](#)),
- *Enumerative Combinatorics*, by Richard Stanley, ([see link here](#))

Other selected texts may be used as well.

**Course Description:** Study of combinatorial structures and techniques, focused primarily on enumerative combinatorics.

**Student Learning Outcomes:** Upon completion of this course, students should be able to do the following:

- write coherent, concise combinatorial proofs of varying difficulty.
- apply combinatorial techniques to solving various discrete math problems.

**Canvas:** You must activate your Canvas account and check it regularly. You can activate your account and log in at <https://www.uttyler.edu/canvas>. If you are registered for the course, then you should already have access to the Canvas page. All announcements and important documents will be posted there.

**Homework and Participation:** Homework will be assigned and collected weekly. There may do presentations of homework problems at times. Students are welcome to collaborate, but all final written solutions must be written individually and in your own words. You must also indicate who you worked with on each problem. There may also be a mini-project at some point during the semester. This would involve reading a paper in combinatorics and presenting the main result to the class. Students are expected to attend class every day and participate in in-class assignments.

**Exams:** There will be two midterms and one final exam. They will probably be take-home tests.

**Make-up Policy:** Make-ups for documented absences required as part of a UT Tyler obligation or for religious observation will be granted. For all make-ups of this type, prior notification of at least one week and documentation are required. Other make-ups are granted at the discretion of the instructor.

**Grading.** Your final grade in this course will be based on the following:

- 25% Midterm 1
- 25% Midterm 2
- 25% Final Exam
- 25% Homework/Participation/etc.

Overall course grades will be assigned based on a scale no more harsh than:

Numerical	Letter
90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
Below 60	F

**Important Dates.** Test dates are TBD.

January 11: First day of class

January 18: Martin Luther King Jr. Day holiday. No class.

January 25: Census date. Last day to change schedule or file for grade replacement.

March 8–12: Spring Break. No class.

March 29: Last day to withdraw.

April 26: Study day.

**University Policies:** Information on University policies concerning:

- UT Tyler Honor Code
- Students Rights and Responsibilities
- Campus Carry
- UT Tyler Tobacco-Free Policy
- Grade Replacement/Forgiveness and Census Date
- State-Mandated Course Drop Policy
- Student Accessibility and Resources
- Student Absence due to Religious Observance
- Student Absence for University-Sponsored Events and Activities
- Social Security and FERPA Statement
- Emergency Exits and Evacuation
- Student Standards of Academic Conduct
- UT Tyler Resources for Students

can be found at

<http://www.uttyler.edu/academicaffairs/files/syllabuspolicy.pdf>