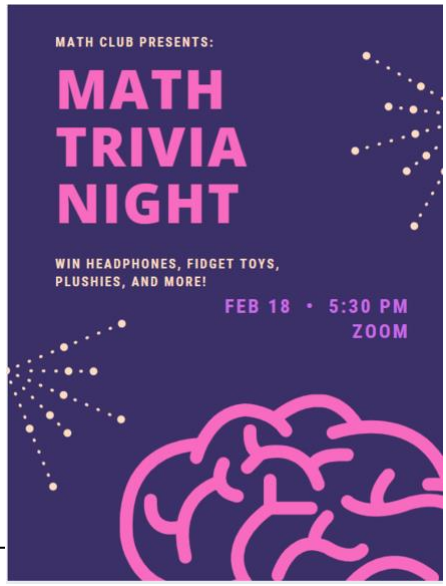
Department of Mathematics

February 15, 2021

Math Club Presents Math Trivia Night



It's been a rough term, so why not treat yourself to some anime and a hype trivia event with the Math Club?

Come test your math knowledge for the chance to win headphones, fidget toys, plushies, and more! A trivia contest will be held on **Thursday, February 18 at 5:30 pm** through **Kahoot** via Zoom. Prizes will be sent directly to the winners after the event.

Zoom link: **https://union.zoom.us/j/7365779779**

Can't make this but want to get involved with Math Club? Email club President **Lily Dong** (dongl@union.edu) to get on the mailing list to hear about upcoming events.

Spring Term Petitioning Starts this Weekend

Petition course signup runs Saturday, February 20 – Tuesday, February 23 via webadvising.union.edu.

The following spring math courses require a petition: Math 61 and 224.

The courses: The full course schedule is online at WebApps or in pdf form here. Courses of particular interest to math majors and minor, beyond the Calculus and Differential Equations courses, include

- **Math/Stat 128** (Probability) is a survey of probability theory: permutations and combinations, conditional probability, Bayes' formula, independence, discrete and continuous random variables, expectation and variance, the Central Limit Theorem, and selected topics. Prerequisites: Math 102, 112, or 113.
- **Math 199** (Logic and Set Theory) is the department's "bridge" course, intended to help students make the transition from computationally oriented courses to more theoretical proof-writing courses. It is a **required** course for all math majors and minors that is *usually* taken after a student has taken Math 115.
- **Math 224** (Geometry) is a course in transformation geometry, studying and classifying the distance preserving functions, called isometries, of the plane. It is a great course for students coming straight from Math 199, a prerequisite. Additionally, as basic transformation geometry is part of "the Common Core" in middle and high school math, this course is wonderful for students considering teaching as a career.
- **Math 332** (Abstract Algebra 1) is a beautiful course that generalizes what you know about algebra in the integers and real numbers to a more abstract setting. The main objects of study in this course are groups, rings, and fields. This course is required for the major. Prerequisites: one of Math 219, 221, 224, 235, 248, or permission from the chair.
- **Math 334** (Partial Differential Equations) Analytic and numerical methods will be introduced to examine the solutions of elliptic, parabolic and hyperbolic types of PDEs. Real-world examples and applications include signal, image and video processing, medical imaging, heat conduction, wave traveling, and so on. Prerequisites: MTH 234 or (MTH 130 and MTH 199)
- **Math 436** (Topology). Topology is the study of the properties of objects in space that are unchanged by continuous deformation, and is considered fundamental in the study of higher mathematics. Prerequisites: a 300-level MTH course or permission from the chair.

Considering pursuing **honors in the major**? Math 436 is being offered this spring. Currently, one 400-level course is being planned for 2021-22, likely in the spring term.

And don't forget Statistics! This spring, **two** statistics courses are being offered:

- **STA 164** (Strategies of Experimentation)
- **STA 364** (Big Data Analytics)

For more info, see the online course listings, https://www.union.edu/mathematics/course-offerings