Department of Mathematics

January 8, 2024

UNDERGRADUATE MATH SEMINAR

This term, the math department will continue to hold its undergraduate seminar. *However, the day-of-week and the time-of-day will vary more than usual.* Don't worry – the math newsletter will be here to keep you abreast of the seminar schedule.

This week, there will be **two** late-afternoon math seminars:

- Tuesday, January 9, 4:45 5:45pm in Bailey 207
- Thursday, January 11, 4:45 5:45pm in Bailey 207

Mark your calendar: next week there will be two more seminars, Tuesday and Friday, both at 4:45pm.

Math Modeling Contests: Apply Mathematics for a Chance to Win \$10,000

The 2024 Mathematical Contest in Modeling (MCM) and Interdisciplinary Contest in Modeling (ICM) will take place **February 1-5, 2024**. These are international contests designed to provide students with the opportunity to work as a team to engage in modeling and problem solving, open to students of all disciplines. You will form a team of up to three students, choose one of six contest problems (continuous, discrete, data insights, operations research/network science, environmental science, and policy), and work over 96 hours to develop a solution to a real-world problem.

For contest and scholarship details and past years' problems, go to: <u>www.mcmcontest.org</u>. Training sessions will be provided. Please contact **Professor Jue Wang** (<u>wangj@union.edu</u>) if you are interested in participating.

Problem of the Newsletter – January 8, 2024

This past Friday was the twelfth day of Christmas. On the first day of Christmas, your true love gave you a partridge in a pear tree. On the second day, they gave you two turtle doves and a partridge in a pear tree. On the third day, they gave you three French hens, two turtle doves, and a partridge in a pear tree. Well, you get the gist. (If not, click <u>here</u>.)

This week's question(s): How many items were you given, in total, by the end of the twelfth day? If Christmas kept going and the presents kept coming, after how many days would you have received 2024 presents? And what if Christmas lasted an entire (leap) year – how many gifts would you have received after 366 days? After *n* days?

Submit solution(s) to **Prof. Paul Friedman** (<u>friedmap@union.edu</u>) by **noon on Friday, January 12.**

CALCULUS HELP CENTER! Sunday - Thursday: 7:30 – 10:00pm in the Sorum House Seminar Room

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Is your team registered yet? The registration deadline is February 1, 2024 at 3:00 pm ET

Register today: ww.mcmcontest.com

COMAP'S Mathematical Contest in Modeling (MCM') Interdisciplinary Contest in Modeling (ICM') is an international math modeling contest for undergraduate students. It is designed to provide students with an opportunity to work as a team to engage in and improve their modeling, problem solving, and writing skills.

Questions? Email: mcm@comap.com Follow @COMAPMath for real-time contest info. Contest Sponsors:

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