

The Almagest

The bi-weekly newsletter of the Alma College Department of Mathematics and Computer Science. Your trusted source for news.

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Math and C.S. Senior Presentations

Mathematics and computer science seniors will be giving presentations for their senior comprehensive projects in March. The dates are as follows:

- March 10:** 4:00 *Katherine Maiville*
4:30 *Marcus Malling*
5:30 **SENIOR DINNER**
- March 12:** 4:30 *Peter Nicaj*
5:00 *Jared Anderson*
- March 17:** 4:00 *Andrew Borzi*
4:30 *Pete Carravallah*
- March 19:** 4:00 *Leighton Collingwood*
4:30 *Mason Ippel*
- March 24:** 4:00 *Brittany Sommerville*
4:30 *Cheyenne Hansen*
- March 26:** 4:00 *Nathan Haut*
- March 31:** Senior Thesis Presentation:
4:00 *Brianne Giddis*

Everyone is invited to attend and support our seniors. The presentations are usually in SAC 113.



Now is the Time to Apply for REU's

Have you ever thought about going to graduate school to study math or computer science?

Would you like to "test the waters" and see if grad school might be right for you? If so, consider applying for a summer REU (Research Experience for Undergraduates). This is a great opportunity to spend 7 or 8 weeks working on an interesting project in math or computer science. And to make it even more attractive, you'll receive a stipend of approximately **\$4,000** in addition to free room and board. There are many REU's dealing with a wide variety of topics. Please check out the topics and application deadlines at the following website:

www.ams.org/employment/reu.html

Calculus and Elementary Statistics Tutors

The tutor for Calculus I and II is **Brianne Giddis**. Brianne's office hours are from 7-9pm every Monday and Wednesday in SAC 216.

The tutor for Elementary Statistics is **Morgan Mydloski**. Morgan's office hours are from 7:30-9:30pm every Tuesday and Thursday in SAC 214.

Please see our tutors if you have questions on course material, homework, or while studying for exams.

Excellent Math YouTubers

Throughout my educational career I've been known to watch a math video or two recreationally (I know, what a nerd). Whether it was to help compliment what I was currently learning in class, or simply because I was interested in a particular topic, I would go out and search for more math-related content. Over the

years I've found many amazing channels that produce content ranging from full lecture series and supplemental materials to interesting problems and proofs. As a late Christmas present, I would like to share some of my favorite creators with you, with the hope that you might find a channel that can help you to further grow your passion for math.

Starting off with the channel that really helped introduce me to the math community on YouTube, **Professor Leonard** is an excellent resource for students struggling with **algebra** and **calculus**. He features full lectures from his classes, as well as links to the materials he uses in his lectures. Recently he has begun a new series of videos going even more in-depth into topics. These videos are filmed independently of a classroom, allowing him to show even more examples and cover content that can't be fit into lectures.

Some channels that cover a variety of topics include **Blackpenredpen**, **Dr. Peyam** and **Mathologer**. Blackpenredpen focuses on shorter problems in **algebra** and **calculus**, occasionally branching out into other topics. He is brief and to the point, but careful in his explanations of the material. Many of his videos center on problems his students have had in the past, or introducing students to new ideas. Dr. Peyam focuses on longer videos dealing with **linear algebra** and **differential equations**. I like this channel because of the detail that Dr. Peyam provides with his proofs. Mathologer is similar to Dr. Peyam in the long form nature of his content, but he distinguishes himself from other creators by the use of well thought out visuals, as well as by using the history of the topic as the framing for the video.

In addition to these channels, some honorable mentions are **Flammable Maths**, who deals with difficult and interesting integrals; **3Blue1Brown**, who also uses visual aids in order to link multiple perspectives on a topic together; and **Numberphile 2**, which is a sister channel to **Numberphile**, providing additional footage and interviews as well as a podcast. The channels that I've listed are only a small portion of the math community, and I hope that through these recommendations you can delve into the community yourself. ~ *Brandon Hart*

The Math Club

This term the Math Club will be meeting on **Tuesday evenings** at 9 pm in DOW 132. All lovers of mathematics are invited. And even if you simply *like* math, your presence is valued!



Puzzle of the Bi-week

Suppose n is a positive integer. If the expression $(x + y)^n$ is expanded, what is the sum of the coefficients?

A prize of **\$1.00** will be awarded to the 1st student who submits the correct answer, and an additional prize of **\$2.00** will be awarded to the 1st student who submits a correct proof to Dr. Westgate.

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If you would like to submit an announcement or a short article, please email it to Brad Westgate (westgatebs@alma.edu).