

## UNDERGRADUATE MATHEMATICS SEMINAR

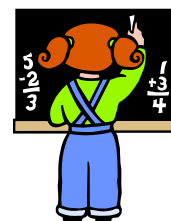
The seminar has closed its doors for the academic year. Thank you to all of this year's speakers and attendees. A special thanks goes to **Professor Alan Taylor** for organizing the seminar (and for providing all of the tasty goodies).

We look forward to seeing you again in the Fall.

## Spring 2007 Math Final Exam Schedule

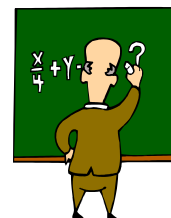
### Monday, June 11, 8:30 - 10:30 A.M.

MTH*102*01	Calculus with Precalc 3	Taylor	BAIL 104
MTH*112*01	Calculus 2	Lesh	OLIN 107+



### Tuesday, June 12, 8:30 - 10:30 A.M.

IMP*113*01	Int Math/Physics 3	Niefield	NWSE 112
MTH*053*01	Visualizing the 4th Dimension	Cervone	BAIL 201+
MTH*117*01	Calculus 4	Barbanel	BAIL 207
MTH*235*01	Number Theory	Zimmermann	BAIL 100



### Tuesday, June 12, 2:30 - 4:30 P.M.

MTH*199*01	Intro to Logic & Set Theory	Zwicker	BAIL 106
MTH*234*01	Differential Equations	Black	BAIL 100
MTH*480*01	Foundations of Mathematics	Taylor	WOLD 109+

### Tuesday, June 12, 5:00 - 7:00 P.M.

MTH*115*01	Calculus 3	Friedman	OLIN 115+
MTH*115*02	Calculus 3	Friedman	OLIN 115+
MTH*130*01	Ordinary Differential Equations	Tonnesen-Friedman	OLIN 115+
MTH*130*02	Ordinary Differential Equations	Tonnesen-Friedman	OLIN 115+

### Wednesday, June 13, 8:30 - 10:30 A.M.

MTH*060*01	Mathematics & Politics	Zwicker	BAIL 100
MTH*138*01	Methods of Applied Math I	Black	SSCI 012+

### Wednesday, June 13, 11:30 - 1:30 P.M.

IMP*113*01	Int Math/Physics 3	Niefield	NWSE 112
MTH*332*01	Abstract Algebra	Lesh	OLIN 307+

### Wednesday, June 13, 2:30 - 4:30 P.M.

MTH*054*01	Number Theory	Barbanel	BAIL 100
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This is the last newsletter of the term!

Good luck on your finals!

**Thank you, CHC Tutors!** The last night that the Calculus Help Center will be open this term is Thursday, June 7. Please join me in thanking all the tutors – **Susan Beckhardt, Michael Doctor, Kelly Testa, and Peter Wright** – for their contributions to the success of this valuable resource.

## Help Wanted!

### Fall Term Tutoring Positions in the Calculus Help Center *Still Available*

Do you enjoy helping your classmates with their calculus assignments? Have you taken the calculus courses through Math 115? Have you received As or A-s in these calculus courses? If so, consider applying for a tutoring position in the Calculus Help Center.

Tutors in the Calculus Help Center work one night per week, Sunday – Thursday in the Fall term, from 7:30 – 10:00pm. A tutor is responsible for helping students in all calculus classes from Math 100 through Math 115. (It is helpful if you have had Math 117 as well, but this is not necessary.) And yes, tutoring is a paid position!

If you are interested in becoming a Calculus Help Center tutor, please send an email to Professor Friedman at [friedmap@union.edu](mailto:friedmap@union.edu) expressing your interest. In your email, describe your calculus background, including your AP coursework (if any), the math courses you have had at Union (course numbers and professor name), and your grades in these courses. For full consideration, you should send this email before **June 5**.

## Resources for Students

- Do you enjoy four-wheelin'? The math department received the following notice: **Evarts High School in Harlan, Kentucky** has a mathematics position available for the 2007-08 school year. Our school is located in the southeastern portion of the state. Evarts is home to a fabulous ATV park that holds a Guinness Book of World Record title for the longest ATV parade. So, if you know of any math major who likes four wheelers, this would be a great place to work!

For information about this position, [please contact Stacy Noah at 606-573-4330, ext. 2013](#).

## Problem of the Newsletter: Bartell and Smith Share Top Honors!

Congratulations to **Brandon Bartell '10** and **Schuyler Smith** for submitting correct solutions to last week's problem of the newsletter. Schuyler's solution has been reproduced below:

**Last week's problem:** If each letter in the expression  $[a+(b/c)]*(d+e)$  is replaced by a different digit from 1 through 9, inclusive, what is the smallest possible integer value of the expression? (Justify your answer.)

**Solution:** First, we know we need to minimize  $a$ ,  $b$ ,  $d$ , and  $e$ , while maximizing  $c$ , so we set  $c = 9$ . Now we see that we want  $b$  to be divisible by 3, because otherwise  $d+e$  would have to be at least 9, so we set  $b = 3$ . Setting  $a = 1$ , and  $d$  and  $e$  to 2 and 4 yields  $[1+(3/9)]*(2+4) = 8$ . Upon quick inspection we see that the least possible value of the expression is  $(1+4/9)*(2+3)$ , which is about 7.2, so we know we found the least possible answer.

**Finally**, this column would like to congratulate **Brandon Bartell '10** and **Schuyler Smith**. They are the top two finishers in this year's *Problem of the Newsletter* competition. Further, kudos to all of the students (and faculty, and alumni) who submitted responses to these problems. Best wishes for a good summer, and when we promise more perplexing problems and puzzles next year!