UNDERGRADUATE MATHEMATICS SEMINAR

The next undergraduate mathematics seminar is … TODAY!

DATE: FRIDAY, February 4th
Time & 3:45pm – Refreshments in the Math Common Room, Bailey 204
Location: 4:00pm – Seminar in Bailey 207

For a description of the seminar (speaker, title, and abstract), please look for the seminar announcements on the walls, doors, and bulletin boards of Bailey Hall.

Upcoming Math Contest at Union College: Saturday February 19

As a nice complement to the fall term fun of the Putnam Exam, on Saturday, February 19 from 9:30am to 12:30pm the math department will be offering its students the opportunity to participate in the fifth annual University of Rochester Math Olympiad. This contest consists of four proof-based problems to be solved over the three hour time period. And … CASH prizes are awarded: $250 for first place, $200 for second place, and $150 for third place.

Nervous about trying something like this? Don’t be! The intention is just to have fun. And, many of the problems are quite accessible. In fact, in each of the two years of Union’s involvement with this competition, Union has had student place in the top ten. Two years ago, a Union student scored 38 out of 40 points! If you would like to see the problems from the past Olympiads, go to http://www.math.rochester.edu/people/faculty/dangeba/urmo.html

If you would like to participate, please contact Professor Friedman in Bailey 107D, or via email: friedmap@union.edu.

Math in Movies

Who doesn’t like a good movie – especially when it contains a little math? Only want to see the “good stuff”? Well, Oliver Knill, a mathematician at Harvard University, has compiled a collection of well over 100 clips of math scenes from movies, including scenes from Die Hard, Good Will Hunting, The Simpsons, and posted them on his Mathematics in Movies page, http://www.math.harvard.edu/~knill/mathmovies/.

Math Movie Clips is another site that has a collection of film snippets related to math, at http://www.qedcat.com/movieclips.html. Films here include Lambada, Team America, World Police, Batman, Bedazzled, and Little Big League. This site was created by mathematicians Burkard Polster and Marty Ross. They plan on adding one clip per week.

The Calculus Help Center is open
7:30-10:00pm
Sunday – Thursday
Sorum House Seminar Room
Opportunities for Math Students

- **On February 8, at 1:00pm in NWSE 116**, representatives from the Naval Officer Program will be presenting an information session about their **Nuclear Propulsion and Engineering** programs. According to their materials, “[t]hese leadership programs offer management experience for upcoming grads as well as exceptional college scholarships for current students. The US Navy offers many benefits when you get involved in their Officer Program as an Engineer. What do they offer?
  - Upon graduation you will be paid a competitive $60K salary and be placed in a leadership/management role from day one
  - Depending on your area of concentration, the Navy will offer scholarships and a monthly stipend to help continue your education
  - Paid graduate program opportunities
  - Commitment can range anywhere from 5-8 years depending on the program you enroll in and you can move on to another job of choice
  - You have the opportunity to travel the world and be a part of something truly amazing

Who are they looking for?
  - Engineering, Math, Physics, and Chemistry majors
  - Well rounded students who have taken on leadership positions through their college experience
  - Students with a sense of adventure

For more information, contact Rochelle Caruso carusor@union.edu at the Becker Career Center.

- **Summer Program** in Quantitative Sciences at the Harvard School of Public Health: June 2 - 30. [http://www.hsph.harvard.edu/biostats/diversity/summer/](http://www.hsph.harvard.edu/biostats/diversity/summer/). This is a wonderful opportunity for undergraduates who are mathematically inclined under-represented minorities, including low income, disabled, and first generation college students. **Application Deadline: Feb. 15.**

According to their materials, “If you like mathematics and would like to learn how quantitative methods can be applied in the study of human health, then the Summer Program in Quantitative Sciences is for you. The Summer Program will introduce you to the power and excitement of math applications to public health, medicine, and biology, and possibly convince you that this is the career direction you've been looking for.

The Summer Program is an intensive 4-week program, during which highly qualified undergraduates receive a whirlwind introduction to the fields of biostatistics and epidemiology and to the use of quantitative methods for biological, environmental, public health, and medical research. The program also provides advice about graduate school and the application process through GRE preparation, meetings with different departments of the Harvard School of Public Health, and individualized mentoring by Harvard faculty.

Problem of the Newsletter: February 4, 2011

**Here is this week’s problem:** Here is another “Proof Without Words”: The following picture can be used to justify a famous summation formula. What is this formula?

**Professor Friedman** will accept solutions to this problem until noon Thursday, February 10th. Email your solution to him (friedmap@union.edu) or put it in his mailbox in the Math Department’s office on the second floor of Bailey Hall.