



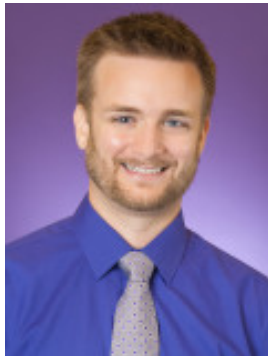
TCU Math Newsletter

Pure mathematics is the world's best game. It is more absorbing than chess, more of a gamble than poker, and lasts longer than Monopoly. It's free. It can be played anywhere - Archimedes did it in a bathtub.

- Richard J. Trudeau

Dr. Eric Hanson Named a 2016 Project NExT Fellow

Dr. Eric Hanson of the TCU Mathematics Department was honored by being named a 2016 Project NExT Fellow.



Project NExT (New Experiences in Teaching) is a professional development program for new or recent Ph.D.s in the mathematical sciences. The program aims to help the participants improve their teaching, engage in research and scholarship, and seek opportunities for service and other professional activities. It also provides the participants with a network of peers and mentors.

As part of the program, Dr. Hanson attended a workshop and special sessions in conjunction with MAA MathFest 2016 in Columbus, Ohio in August 2016. He will also participate in special events at the Joint Mathematics Meetings in Atlanta in January 2017, and he will attend another workshop at MAA MathFest 2017 in Chicago, Illinois.

Spring 2017 Math Courses

In addition to its regularly scheduled offerings through the 30000-level, the TCU Mathematics Department will offer 40603 Actuarial Mathematics, 40663 Numerical Analysis, 40970 Mathematical Foundations (to prepare students for the proof-oriented courses Abstract Algebra Real Analysis), 50073 History of Mathematics, 50253 Abstract Algebra I, 50703 Number Theory, 40970 Applied Linear Algebra, 40970 Multivariable Real Analysis, and 40970 Advanced Complex Analysis.

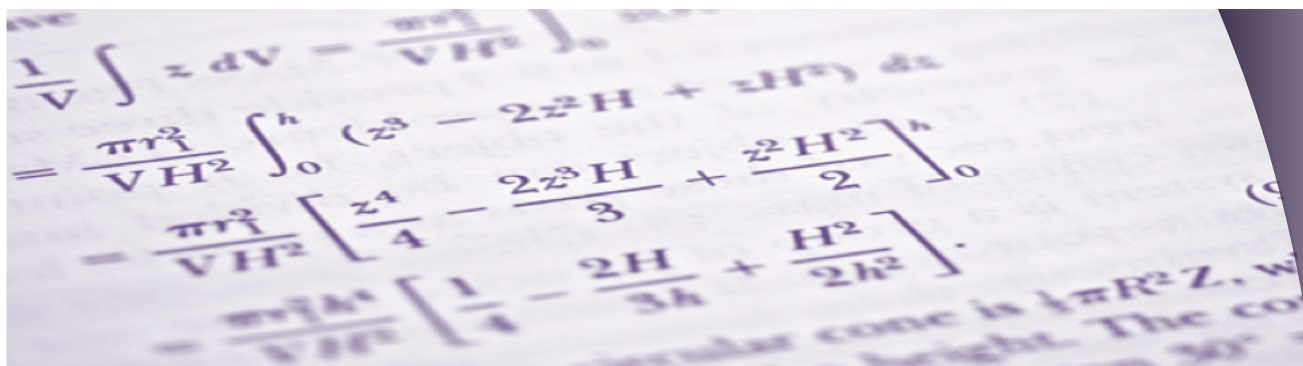
To see likely offerings over the next few years, please visit

<http://mathematics.tcu.edu/wp-content/uploads/2016/03/Schedule.pdf>

Frank Stones Colloquium Talk on October 21

Professor Kevin Kordek from Texas A&M University will present a colloquium talk on Friday, October 21 at 3:30 pm in TUC 352.

TCU students and members of the community are invited to attend the talk. Refreshments will be served in TUC 300 during the half hour before the talk.



Solution to the September 2016 Problem of the Month

Problem: A fantasy football league has 10 teams, split into two divisions of 5 teams each. Each team will play one opponent in each week of the 12-game regular season. Is it possible for the league manager to construct a schedule such that every team plays every team in its own division once or twice and plays every team in the other division exactly once?

Solution: There must be exactly $5 \cdot 5 = 25$ interdivisional games. In a particular week, there will be 1, 3, or 5 interdivisional games. However, the sum of an even number of odd numbers is even, hence can't equal 25.

October 2016 Problem of the Month

This month's problem is a tweak of one suggested by Qi An, a colleague of Brad Beadle ('96). Use the basic operations of arithmetic (addition, subtraction, multiplication, and division) to obtain the value 21 using each of the prime numbers 2, 3, 5, and 7 exactly once.

Students and others are invited to submit solutions to Dr. George Gilbert by e-mail (g.gilbert@tcu.edu) or hard copy (Math Dept. Office or TCU Box 298900). Correct solutions submitted by persons who are not members of the TCU math faculty will be acknowledged in the next issue of the newsletter. Note that a correct solution is an answer and a justification of its correctness. The solution to the problem will be published in the next edition of the newsletter.

Editor: Rhonda Hatcher
Problem Editor: George Gilbert
Thought of the Month Editor: Robert Doran