

NORTHEASTERN SECTION, MAA

The Mini-Course

Creative Problem Solving

June 3, 2004

Roger Williams University

Mikhail Chkhenkeli, Western New England College

ABOUT THE MINI-COURSE

Mathematics is a problem-solving driven discipline and learning to solve problems is one of the principal reasons for studying mathematics. In this course the presenter will share his experience of teaching Creative Problem Solving courses, as well as provide hands-on activities that illustrate the main philosophy of this teaching method: students discover and learn about the great beauty of mathematics through non-standard and thought-provoking problems that require creative approach. In particular, the course will discuss creative problems from several areas of mathematics, problem-solving techniques, and how these problems help students to develop their mathematical intuition and imagination.

The course is for college professors and high school teachers who plan to develop and teach problem solving courses, as well as everyone who enjoys the creative process of solving mathematical problems.

MINI-COURSE SCHEDULE

Thursday, June 3rd, 1 p.m. – 6 p.m., with breaks between activities

Creative Problem Solving as a Teaching Method

Hands-on activities:

Problem Solving in Geometry

Problem Solving in Algebra and Number Theory

Problem Solving in Combinatorics and Probability Theory

Problem Solving in Graph Theory

Problem Solving in Topology

Mathematical Brainteasers

ABOUT THE PRESENTER

Mikhail Chkhenkeli is an associate professor in the Department of Mathematics and Computer Science at Western New England College. He received his doctorate in Mathematics from the University of Pennsylvania. He has taught a variety of courses from Pre-Calculus to Differential Topology at the University of Pennsylvania, Williams College, Western New England College, and at the Johns Hopkins University CTY Summer Programs. He has designed and taught several Creative Problem Solving courses for undergraduate math majors and non-majors, talented high-school students, and mathematics teachers. He is currently working on a book "Creative Problem Solving in Mathematics."

ACCOMMODATIONS/COST

The Mini-Course will be held at the Conference Center of Roger Williams College. There will be a snack break (domestic cheese and fruit with assorted crackers and sodas) midway through the course.

There will be a cash bar starting at 6:15 pm with a buffet dinner at 7 pm. The dinner will include two entrees, Vegetable Lasagna and Marinated Steak Tips, and Caesar Salad, Vegetable, Potatoes/Rice, Dessert, Coffee, Tea, and Decaf.

The total cost for mini-course registration, snack break and dinner is only **\$50**.

Housing at the Conference Center is available at a rate of \$79, single or double, in a hotel type room including a continental breakfast. Participants will need to make their own housing reservation by calling

401-683-3600 and indicating that they are part of the MAA group, in order to receive this group rate. We have held 25 rooms at the center until mid-May.

REGISTRATION

Please mail this form (or photocopy) early (deadline May 28) to:

Ann Kizanis, Associate Dean
School of Arts and Sciences
Western New England College
Springfield, MA 01119
email: akizanis@wnecc.edu
Telephone: (413) 782-1784

Include a check, payable to NES-MAA, for \$50.

MINI-COURSE REGISTRATION

Name _____

Address _____

City _____ State _____ Zip _____

Institution _____

Telephone _____ e-mail _____